FILE 'HOME' ENTERED AT 11:33:03 ON 03 MAY 2007

=> file registry

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

0.21

0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:33:15 ON 03 MAY 2007
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STRUCTURE FILE UPDATES: 2 MAY 2007 HIGHEST RN 934214-84-3 DICTIONARY FILE UPDATES: 2 MAY 2007 HIGHEST RN 934214-84-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10706328_updated.str

chain nodes :

7 12 13 29 30 31 32 33 34 35

ring nodes :

25 14 15 16 17 18 19 20 21 22 23 1 2 3 5 10 11 27 28

chain bonds :

1-32 2-31 3-30 4-7 8-13 9-14 10-12 19-33 20-34 21-23 22-35 26-29

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-8 6-11 8-9 9-10 10-11 14-15 14-18 15-16 16-17

16-19 17-18 17-22 19-20 20-21 21-22 23-24 23-28 24-25 25-26 26-27 27-28 exact/norm bonds:

5-8 6-11 8-9 8-13 9-10 10-11 10-12 14-15 14-18 15-16 17-18 21-23 23-24 23-28 24-25 25-26 26-27 27-28

exact bonds :

1-32 2-31 3-30 4-7 9-14 19-33 20-34 22-35 26-29

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 16-17 16-19 17-22 19-20 20-21 21-22

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom

11:Atom 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom

20:Atom 21:Atom

22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:CLASS 30:CLASS

31:CLASS 32:CLASS

33:CLASS 34:CLASS 35:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

$$\begin{array}{c} H \\ \\ H \\ \\ H \end{array}$$

Structure attributes must be viewed using STN Express query preparation.

=> s l1 exa

SAMPLE SEARCH INITIATED 11:33:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7 TO 298

PROJECTED ANSWERS: 0 TO 0

=> s ll exa full

FULL SEARCH INITIATED 11:33:44 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 212 TO ITERATE

100.0% PROCESSED 212 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L3 2 SEA EXA FUL L1

=> d 13 1-2

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN

RN 692737-81-8 REGISTRY

ED Entered STN: 14 Jun 2004

CN 2(1H)-Quinolinone-4-14C, 4-amino-5-fluoro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)

MF C21 H21 F N6 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN
- RN 405169-16-6 REGISTRY
- ED Entered STN: (12 Apr 2002)
- CN 2(1H)-Quinolinone, 4-amino-5-fluoro-3-[6-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2(1H)-Quinolinone, 4-amino-5-fluoro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]- (9CI)

OTHER NAMES:

CN 4-Amino-5-fluoro-3-[5-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]quinolin-2(1H)-one

CN CHIR 258

DR 804551-71-1

MF C21 H21 F N6 O

CI COM

SR CA

LC STN Files: CA, CAPLUS, CASREACT, IMSDRUGNEWS, IMSRESEARCH, PROUSDDR, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

30 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

30 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file medline caplus wpids uspatfull

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

62.60 62.81

FILE 'MEDLINE' ENTERED AT 11:34:23 ON 03 MAY 2007

FILE 'CAPLUS' ENTERED AT 11:34:23 ON 03 MAY 2007

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FILE 'WPIDS' ENTERED AT 11:34:23 ON 03 MAY 2007

COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 11:34:23 ON 03 MAY 2007

CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 13

SAMPLE SEARCH INITIATED 11:34:29 FILE 'WPIDS'

SAMPLE SCREEN SEARCH COMPLETED -

0 TO ITERATE

100.0% PROCESSED

0 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

> BATCH **COMPLETE**

PROJECTED ITERATIONS:

O TO

0 TO

PROJECTED ANSWERS:

50 L3

=> d 14 1-50 ibib abs

ANSWER 1 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:150229 CAPLUS Full-text

DOCUMENT NUMBER:

146:221063

TITLE:

Method for assaying anti-tumor effect of angiogenesis

inhibitor

INVENTOR(S):

Uenaka, Toshimitsu; Yamamoto, Yuji; Matsui, Junji

PATENT ASSIGNEE(S):

Eisai R & D Management Co., Ltd., Japan

PCT Int. Appl., 147pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent Japanese LANGUAGE FAMILY ACC NUM. COUNT: PATENT INFORMATION: DATE PATENT NO. KIND DATE APPLICATION NO. WO 20070155\\\ WO 2006-JP315698 A1 20070208 20060802 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CX, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, QD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2005-224173 PRIORITY APPLN. INFO.: A 20050802 JP 2006-164700 A 20060614 MARPAT 146:221063 OTHER SOURCE(S): Disclosed is a method for predicting the anti-tumor effect of an angiogenesis AB inhibitor. The method comprises evaluating the EGF-dependence property of an angiogenesis inhibitor with respect to proliferation and/or survival of tumor cells, and using the evaluated EGF-dependence property as a measure. The anti-tumor effect of an angiogenesis inhibitor correlates with the EGFdependency property of the inhibitor with respect to proliferation and/or survival of tumor cells. Therefore, an angiogenesis inhibitor is capable of exerting an excellent anti-tumor effect by using it in combination with a substance having an EGF inhibitory effect. THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 7 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 2 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN 2007:144036 CAPLUS Full-text ACCESSION NUMBER: DOCUMENT NUMBER: 146:221062 Method for predicting antitumor efficacy of TITLE: angiogenesis inhibitor Matsui, Junji; Semba, Taro INVENTOR(S): PATENT ASSIGNEE (S): Eisai R & D Management Co., Ltd., Japan PCT Int. Appl., 104pp. SOURCE: CODEN: PIXXD2 Patent DOCUMENT TYPE: Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE · -->(---------20070208 WO 2006-JP315563 20060801 WO 2007015569 A1

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2007015569 A1 20070208 WO 2006-JP315563 20060801
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,
MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,
SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,
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US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                                              JP 2005-223440
                                                                    A 20050801
PRIORITY APPLN. INFO.:
                          MARPAT 146:221062
OTHER SOURCE(S):
     A method for predicting the antitumor efficacy of an angiogenesis inhibitor is
AB
      provided, which comprises measuring the number of blood vessels surrounded by
     pericytes in tumor, and using the measurement value as a measure for the anti-
      tumor effect.
                                 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 3 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                          2007:119480 CAPLUS Full-text
DOCUMENT NUMBER:
                          146:206220
TITLE:
                          Multicyclic sulfonamide compounds as inhibitors of
                          histone deacetylase for the treatment of disease and
                          their preparation
                          Malecha, James W.; Noble, Stewart A.; Wiley, Brandon
INVENTOR (S) ?
                          M.; Hoffman, Timothy Z.; Bonnefous, Celine; Sertic,
                          Michael; Wash, Paul L.; Smith, Nicholas D.; Hassig,
                          Christian A.; Scranton, Shawn A.; Payne, Joseph E.;
                          Hager, Jeffery
                          Kalypsys, Inc., USA
PATENT ASSIGNEE(S):
                          V.S. Pat. Appl. Publ., 44pp.
SOURCE:
                          CÒDEN: USXXCO
                          Patent
DOCUMENT TYPE:
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
                                                                       DATE
                                              ______
     _____
                          ----
                                  _____
     US 2007027184
                           A1
                                  20070201
                                              US 2006-496784
                                                                       20060727
                                              WO 2006-US29438
                                                                       20060727
     WO 2007016354
                           A1
                                  20070208
             AE, AG, AL, AM, AT, AU, AZ, BA, BR, BG, BR, BW, BY, BZ, CA, CH,
         W:
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             KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,
              SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TT, TZ, UA, UG,
              US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
              IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
              CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TQ, TG, BW, GH,
              GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                              US 2005-704091P
                                                                       30050729
                                              US 2006-780129P
                                                                    P 20060307
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OTHER SOURCE(S):

MARPAT 146:206220

GI

AB Disclosed herein are sulfonamide compds. of formula I as described herein. Compds. of formula I wherein G1 is bond, alkenyl, alkoxy, alkoxyalkyl, alkyl, alkylamino, alkylcarbonyl, etc.; G2 is (un)substituted (mono/poly) heteroaryl; G3 is SO2NH and derivs., NHSO2 and derivs., C1-3 alkyl-SO2NH and derivs., and NHSO2-C1-3 alkyl and derivs.; G4 is bicyclic (hetero)aryl, and (hetero)cycloalkyl-fused monocyclic (hetero)aryl; W is OH and derivs., (un) substituted oxyalkyl, SH and derivs., etc.; R1 is H, PO3H2 and derivs., CN, (un) substituted acyl, (hetero) aryl, alkyl, aroyl, etc.; R2 and R3 are independently H, Me, and Et; and their therapeutically acceptable salts, esters, and prodrugs thereof, are claimed. Methods and compns. are disclosed for treating disease states including, but not limited to cancers, autoimmune diseases, tissue damage, central nervous system disorders, neurodegenerative disorders, fibrosis, bone disorders, polyglutamine-repeat disorders, anemias, thalassemias, inflammatory conditions, cardiovascular conditions, and disorders in which angiogenesis play a role in pathogenesis, using the compds. of the invention. In addition, methods of modulating the activity of histone deacetylase (HDAC) are also disclosed. Example compound II was prepared by chlorination of 6-chloronicotinic acid; the resulting 6-chloronicotinoyl chloride underwent alkylation of di-Me malonate to give di-Me 2-(6chloronicotinoyl) malonate, which underwent decarboxylation to give 2-chloro-5acetylpyridine, which underwent amination to give 2-amino-5-acetylpyridine, which underwent sulfamidation with 2,3-dihydrobenzo[1,4]dioxin-6-sulfonyl chloride to give 2,3-dihydrobenzo[1,4]dioxin-6-sulfonic acid (5-acetylpyridin-2-yl)amide, which underwent bromination to give 2,3-dihydrobenzo[1,4]dioxin-6sulfonic acid (5-(bromoacetyl)pyridin-2-yl)amide, which underwent substitution with potassium thioacetate to give compound II. All the invention compds. were evaluated for their HDAC inhibitory activity. From the assay, it was determined that compound II exhibited in vitro and cellular IC50 values of ≤ 1 μΜ.

L4 ANSWER 4 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:1252191 CAPLUS Full-text

DOCUMENT NUMBER: 146:13206

TITLE: Crystalline forms of 4-amino-5-fluoro-3-[5-(4-

methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-1H-

quinolin-2-one lactic acid salts

INVENTOR(S): Okhamafe, Augustus; Chou, Joyce; Gullapalli, Rampurna;

Harwood, Eric; Ryckman, David; Zhu, Shuguang; Shang,

Xiao

PATENT ASSIGNEE(S):

SOURCE:

Novartis A.-G., USA PCT Int. Appl., 107pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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· PATENT NO.
                     KIND
                             DATE
                                        APPLICATION NO.
                                                                DATE
                      _ _ _ _
                                                                _____
                                         WO 2006-US20296
                                                                20060523
 WO 2006127926
                      A2
                             20061130
                             20070118
 WO 2006127926
                      A3
         AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
         CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
         GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
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         MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
         SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
         VN, YU, ZA, ZM, ZW
     RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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         CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
         GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
         KG, KZ, MD, RU, TJ, TM
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PRIORITY APPLN. INFO.:

US 2005-683999P P 20050523

The present invention relates to non-hydrate crystalline forms of 4-amino-5-AB fluoro-3-[5-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-1H- quinolin-2-one lactic acid salts (I), solid pharmaceutical formulations containing the same and methods of use. The present invention also relates to crystalline hydrates of I, pharmaceutical formulations containing them and methods of use related thereto. The present invention further relates to crystalline solvates of I. I was prepared in a series of steps from 5-chloro-2nitroaniline and 1-methylpiperazine. The crystal form of I was prepared

ANSWER 5 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN 2006:1225966 CAPLUS Full-text ACCESSION NUMBER:

146:722

DOCUMENT NUMBER:

Methods for treating drug resistant cancer TITLE:

Michelson, Glenn C.; Chan, Vivien W.; Heise, Carla C.; INVENTOR(S):

Wiesmann, Marion; Dawes, Timothy D.

PATENT ASSIGNEE(S):

SOURCE:

Novartis AG, USA

PCT Int. Appl., 151pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124413	A2	20061123	WO 2006-US17922	20060510
			BB BG, BR, BW,	
			DZ, EC, EE, EG,	
GE, GH,	SM, HR, HU	, ID, IL, IN,	IS, JP, KE, KG,	KM, KN, KP, KR,
. KZ, LC,	K, LR, LS	, LT, LU, LV,	LY, MA, MD, MG,	MK, MN, MW, MX,
MZ, NA,	NG, NI, NO	, NZ, OM, PG,	PH, PL, PT, RO,	RU, SC, SD, SE,
SG, SK,	SL, SM, SY	T, TJ, TM, TN,	TR, TT, TZ, UA	UG, US, UZ, VC,
, ,	ZA, ZM, ZW			
RW: AT, BE,	BG, CH, CY	, CZ, DE, DK,	EE, ES, FI, FR,	GB, GR, HU, IE,
IS, IT,	LT, LU, LV	, MC, NL, PL,	PT, RO, SE, SI,	SK, TR, BF, BJ,
CF, CG,	CI, CM, GA	, GN, GQ, GW,	ML, MR, NE, SN,	TD, TG, BW, GH,
GM, KE,	LS, MW, MZ	, NA, SD, SL,	SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

US 2005-680722P P 20050513

OTHER SOURCE(S):

MARPAT 146:722

This invention pertains generally to methods of treating cancer. More AB specifically, the invention pertains to methods and 4-amino substituted quinolinone benzimidazolyl compds. such as 4-amino-5-fluoro-3-[5-(4methylpiperazin-1-yl)-1H-benzimidazol-2-yl]quinolin-2(1H)-one compds. and pharmaceutical formulations comprising such compds. for treating drugresistant cancer and patients with drug resistant cancer.

ANSWER 6 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN L4

ACCESSION NUMBER:

2006:1225007 CAPLUS Full-text

DOCUMENT NUMBER:

145:505480

TITLE:

SOURCE:

Process for preparation of 5-(4-methylpiperazin-1-yl)-

2-nitroaniline from 1-methylpiperazine and

5-halo-2-nitroaniline.

INVENTOR (S):

Calvin, Gabriel; Harwood, Eric; Ryckman, David; Zhu,

Shuquanq

PATENT ASSIGNEE(S):

Novartis AG, USA PCT Int. Appl., 88pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE	ENT :	NO.			KŦŊ) !	DATE		i	APPL:	ICAT:	ION 1	. 01		D	ATE	
						_/		-						- -	-		
WO 2	2006	1251	30		A1		2006	1123	1	WO 2	7-30C	JS19:	349		2	0060	517
	W:	ΑE,	AG,	AL,	AM,	AT,	ΆU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
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		KZ,	LC,	LK,	LR,	LS,	LT,	Ľΰ	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
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		VN,	YU,	ZA,	ZM,	ZW			\								
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	ÈĘ,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		ıs,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
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		KG,	KZ,	MD,	RU,	TJ,	TM				,						
RITY	APP	LN.	INFO	. :					1	US 2	005-0	8 1 /83	93P		P 2	0050	517

PRIORITY APPLN. INFO.:

US 2005-681893P

CASREACT 145:505480 OTHER SOURCE(S):

A method for synthesizing 5-(4-methylpiperazin-1-yl) 2-nitroaniline (I) comprises reaction of 1-methylpiperazine with 5-halo-1-nitroaniline at 90-110° in a first (organic) solvent followed by cooling the mixture to 85-95°, adding a second solvent, and forming a slurry of the title compound Thus, 5-chloro-2-nitroaniline and 1-methylpiperazine were heated in EtOH at 97° for approx. 40 h; the mixture was cooled to 80° followed by addition of \20 and cooling over 4 h to room temperature to give after filtration and drying 99% I.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN 2006:816356 CAPLUS Full-text ACCESSION NUMBER -146:265940

3

DOCUMENT NUMBER:

TITLE:

CHIR-258 Is Efficacious in A Newly Developed Fibroblast Growth Factor Receptor 3-Expressing Orthotopic Multiple Myeloma Model in Mice

AUTHOR(S):

Xin, Xiaohua; Abrams, Tinya J.; Hollenbach, Paul W.; Rendahl, Katherine G.; Tang, Yan; Oei, Yoko A.; Embry, Millicent G.; Swinarski, Debbie E.; Garrett, Evelyn N.; Pryer, Nancy K.; Trudel, Suzanne; Jallal, Bahija;

Mendel, Dirk B.; Heise, Carla C.

CORPORATE SOURCE:

Translational Sciences, Chiron Corporation,

Emeryville, CA, 94608, USA

SOURCE:

Clinical Cancer Research (2006), 12(16), 4908-4915

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER:

American Association for Cancer Research

Journal English

DOCUMENT TYPE: LANGUAGE:

PURPOSE: The ectopically expressed and deregulated fibroblast growth factor AB receptor 3 (FGFR3) results from a t(4;14) chromosomal translocation that occurs in .apprx.15% of multiple myeloma (MM) patients and confers a particularly poor prognosis. This study assesses the antimyeloma activity of CHIR-258, a small-mol. inhibitor of multiple receptor tyrosine kinases that is currently in phase I trials, in a newly developed FGFR3-driven preclin. MM animal model. Exptl. Design: the authors developed an orthotopic MM model in mice using a luciferase-expressing human KMS-11-luc line that expresses mutant FGFR3 (Y373C). The antimyeloma activity of CHIR-258 was evaluated at doses that inhibited FGFR3 signaling in vivo in this FGFR3-driven animal model. RESULTS: Noninvasive bioluminescence imaging detected MM lesions in nearly all mice injected with KMS-11-luc cells, which were mainly localized in the spine, skull, and pelvis, resulting in frequent development of paralysis. Daily oral administration of CHIR-258 at doses that inhibited FGFR3 signaling in KMS-11luc tumors in vivo resulted in a significant inhibition of KMS-11-luc tumor growth, which translated into a significant improvement in animal survival. CONCLUSIONS: the authors' data provide a relevant preclin. basis for clin. trials of CHIR-258 in FGFR3-pos. MM patients.

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:763835 CAPLUS Full-text

20

DOCUMENT NUMBER:

145:202872

TITLE:

Treatment of metastasized tumors

INVENTOR (S):

Lopes De Menezes, Daniel; Heise, Carla; Xin, Xiaohua

Chiron Corporation, USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 101pp.

SOURCE:

DOCUMENT TYPE:

CODEN: PIXXD2

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	CENT I		KINI)	DATE			APPL	ICAT:	I NO	NO.		D	ATE			
						-											
WO	20060	08144	15		A2		2006	2803		WO 2	006-T	JS29'	79		20	00601	127
WO	20060	08144	15		A 3		2007	0111									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,
		VN,	YU,	ZA,	ZM,	zw											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,

COMPOUND TO TREAT METASMSEZED

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM

Α1

US 2006 342257 20060127 US 2005-647568P P 20050127

US 2006183750 PRIORITY APPLN. INFO.:

US 2005-647568P P 20050127 US 2005-669245P P 20050406 US 2005-722053P P 20050929

OTHER SOURCE(S):

MARPAT 145:202872

20060817

AB Methods of treating metastatic cancer such as metastasized tumors include administering a compound of Structure I, a tautomer of the compound, a pharmaceutically acceptable salt of the compound, a pharmaceutically acceptable salt or the tautomer, or a mixture thereof to a subject. The compound, tautomer, salt of the compound, salt of the tautomer, or mixture thereof may be used to prepare medicaments for treating metastatic cancer. The variable A has the values defined herein.

L4 ANSWER 9 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:394720 CAPLUS Full-text

DOCUMENT NUMBER:

CORPORATE SOURCE:

145:39944

TITLE:

Inhibition of phosphorylation of the

colony-stimulating factor-1 receptor (c-Fms) tyrosine

kinase in transfected cells by ABT-869 and other

tyrosine kinase inhibitors

AUTHOR (S).

Guo, Jun; Marcotte, Patrick A.; McCall, J. Owen; Dai,

Yujia; Pease, Lori J.; Michaelides, Michael R.;

Davidsen, Steven K.; Glaser, Keith B.

Cancer Discovery Research (R47J), Global

Pharmaceutical Research and Development, Abbott

Laboratories, Abbott Park, IL, USA

Molecular Cancer Therapeutics (2006), 5(4), 1007-1013

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CODEN: MCTOCF; ISSN: 1535-7163

PUBLISHER:

SOURCE:

American Association for Cancer Research

DOCUMENT TYPE: Journal LANGUAGE: English

The properties of several multitargeted receptor tyrosine kinase inhibitors ΔR were studied for their inhibition of colony-stimulating factor-1 receptor (CSF-1R) signaling. A structurally novel, multitargeted tyrosine kinase inhibitor (ABT-869), imatinib (STI571), and 4 compds. currently in clin. development (AG013736, BAY 43-9006, CHIR258, and SU11248) were tested for inhibition of CSF-1R signaling in both the enzymic and cellular assays. ABT-869 showed potent CSF-1R inhibition in both the enzyme and cell-based assays (IC50s < 20 nmol/L). In contrast to a previous report, we have found that imatinib has activity against human CSF-1R in both assays at submicromolar concns. In enzyme assays, we have found that the inhibition of CSF-1R by both ABT-869 and imatinib are competitive with ATP, with Ki values of 3 and 120 nmol/L, resp. SU11248 is a potent inhibitor of CSF-1R in the enzyme assay (IC50 = 7 nmol/L) and inhibits receptor phosphorylation in the cellular assay (IC50 = 61 nmol/L). AG013736 was also a potent inhibitor of CSF-1R in both assays (enzyme, IC50 = 16 nmol/L; cellular, IC50 = 21 nmol/L), whereas BAY 43-9006 is less potent in the enzyme assay (IC50 = 107 nmol/L) than in the cellular system (IC50 = 20 nmol/L). In contrast, we found that CHIR258 had less activity in the cellular assay (IC50 = 535 nmol/L) relative to its enzymic potency (IC50 = 26 nmol/L). These results show the use of a cellbased assay to confirm the inhibitory activity of lead compds. and drug candidates, such as ABT-869, against the CSF-1R protein in situ. REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 10 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:317747 CAPLUS Full-text

DOCUMENT NUMBER: 145:305178

TITLE: Advances in oral therapy for multiple myeloma

AUTHOR(S): Morgan, Gareth J.; Krishnan, Biju; Jenner, Matthew;

Davies, Faith E.

CORPORATE SOURCE: Royal Marsden Hospital and Institute of Cancer

Research, London, UK

SOURCE: Lancet Oncology (2006), 7(4), 316-325

CODEN: LOANBN; ISSN: 1470-2045

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Conventional i. chemotherapy regimens are toxic, cumbersome, and neg. affect patients' quality of life, with oral treatment preferable to most patients with cancer. Multiple myeloma is the second most common haematol. malignant disease, but cannot be cured with conventional and high-dose chemotherapy. New oral treatments that target myeloma cells or bone marrow are being developed that are highly effective yet have low toxic effects, such as the immunomodulatory drugs thalidomide and lenalidomide. Several treatments in early development have shown antimyeloma activity, including: CHIR-258, which inhibits fibroblast growth factor receptor 3; NVP-ADW742, which inhibits insulin-like growth factor receptor 1; and PTK787, which inhibits vascular endothelial growth factor. Addnl. drugs aimed at switching off silenced genes include histone deacetylase inhibitors. The availability of these various oral treatments is hoped to improve regimens that, if used sequentially or in combination, offer the potential of making multiple myeloma a chronic disease, thereby extending patients' lifespans and improving quality of life.

REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:268466 CAPLUS Full-text

DOCUMENT NUMBER: 144:324798

TITLE: Simultaneous use of sulfonamide-containing compound

and angiogenesis inhibitor

INVENTOR(S): Owa, Takashi; Ozawa, Yoichi; Semba, Taro

PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan SOURCE: PCT Int. Appl., 270 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PAT	CENT	NO.			KIN	o :	DATE		;	APPL	ICAT:	ION I	NO.		D	ATE	
						_									-		
WO	2006	0309	41		A1		2006	0323		WO 2	005-	JP17	228		2	0050	913
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	VP,	KE,	KG,	KM,	ΚP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MGX	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	zw													
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	Sβ,	GR,	HU,	ΙE,
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		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TE.	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ĄΖ,	BY,
		KG,	KZ,	MD,	RU,	ТJ,	TM										
WO	2006	0309	47		A1		2006	0323	1	WO 2	005-	JP17:	238		2	0050	913

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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
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             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                                 20060622
                                             US 2005-226655
     US 2006135486
                          A1
                                                                     20050913
PRIORITY APPLN. INFO.:
                                             US 2004-609452P
                                                                  Ρ
                                                                     20040913
                                             JP 2005-54150
                                                                  Α
                                                                     20050228
                                             JP 2005-54475
                                                                  Α
                                                                     20050228
OTHER SOURCE(S):
                          MARPAT 144:324798
     A pharmaceutical composition comprising a sulfonamide-containing compound
     combined with an angiogenesis inhibitor.
                                THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                          15
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 12 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN
L4
ACCESSION NUMBER:
                          2006:167710 CAPLUS Full-text
DOCUMENT NUMBER:
                          144:267266
                          Flt3 inhibitors for immune suppression
TITLE:
INVENTOR(S):
                          Small, Donald; Whartenby, Katherine A.; Pardoll, Drew
                         The Johns Hopkins University, USA
PATENT ASSIGNEE(S):
SOURCE:
                          PCT Int. Appl., 81 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT.
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
     _____
                                             ______
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                          A2
                                 20060223
                                             WO 2005-US25318
                                                                     20050714
     WO 2006020145
                                 20070308
     WO 2006020145
                          A3
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FY, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                                             AU 2005-274852
                                                                     20050714
     AU 2005274852
                           A1
                                 20060223
                                 20060223
                                             CA 2005-2574150
                                                                     20050714
     CA 2574150
                          A1
                                 20070502
                                             EP 2005-790718
                                                                     20050714
     EP 1778224
                          A2
             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
PRIORITY APPLN. INFO.:
                                             US 2004-589511P
                                                                  P 20040719
                                             WO 2005-US25318
                                                                  W 20050714
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OTHER SOURCE(S): MARPAT 144:267266

New methods are provided for suppressing the immune system and for treating AΒ immune related disorders. Therapies of the invention include administration of an FLT3 inhibitor compound to a subject in need thereof, such as a subject suffering from organ rejection, bone marrow transplant rejection, acquired immune deficiency syndrome, arthritis, aplastic anemia, graft-vs.-host disease, Graves' disease, established exptl. allergic encephalitomyelitis, multiple sclerosis, lupus, or a neurol. disorder. Methods are also provided for screening therapeutic agents for treating immune disorders, including the use of a mouse having an elevated level of FLT3 receptor activity.

ANSWER 13 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN L42005:1341902 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 144:232902

LHMDS mediated tandem acylation-cyclization of TITLE:

> 2-aminobenzenecarbonitriles with 2-benzimidazol-2-yl acetates: a short and efficient route to the synthesis of 4-amino-3-benzimidazol-2-ylhydroquinolin-2-ones Antonios-McCrea, William R.; Frazier, Kelly A.; Jazan,

AUTHOR (S): Elisa M.; Machajewski, Timothy D.; McBride,

Christopher M.; Pecchi, Sabina; Renhowe, Paul A.;

Shafer Cynthia M.; Taylor, Clarke

Small Molecule Drug Discovery, Medicinal Chemistry CORPORATE SOURCE:

Department, Chiron Corporation, Emeryville, CA, 94608,

Tetrahedron Letters (2006), 47(5), 657-660 SOURCE:

CODEN: TELEAY; ISSN: 0040-4039

Elsevier B.V. PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

CASREACT 144:232902 OTHER SOURCE(S):

The discovery of a mild, one-pot tandem acylation-cyclization for the synthesis of 4-amino-3-(2-benzimidazolyl)quinolinone derivs. from 2-

aminobenzonitrile derivs. and Et (2-benzimidazolyl) acetate derivs. is described. Among the reagents evaluated, lithium hexamethy disilazide (LHMDS)

was the most efficient.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 14 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN L42005:1242789 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:477969

Preparation of benzimidazole guinolinones for TITLE:

inhibiting FGFR3 and treating multiple myeloma

Cai, Shaopei; Chou, Joyce; Harwood, Eric; Heise, Carla INVENTOR(S):

C.; Machajewski, Timothy D.; Ryckman, David; Shang,

Xiao; Wiesmann, Marion; Zhu, Shuguang

Chiron Corporation, USA PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 239 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 644,055.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO
US 2005261307 US 2004092535	Α1 Δ1	20051124	US 2004-983174 US 2003-644055
05 2004072555	***	20010313	35 2003 (377035)

Comfound to TREAT MNUTFICE MYECOMA
DATE NO ANC OF 20041105 20030819

METIND OF INHEBITANG TYROSENE KMASE NO AND

CN 1692112	Α	20051102	CN	2003-824565		20030819
US 2005203101	A1	20050915	US	2004-839793		20040505
PRIORITY APPLN. INFO.:			US	2002-405729P	P	20020823
			US	2002-426107P	P	20021113
			US	2002-426226P	P	20021113
			US	2002-426282P	P	20021113
			US	2002-428210P	P	20021121
			US	2003-460327P	P	20030403
			US	2003-460328P	P	20030403
			US	2003-460493P	P	20030403
			US	2003-478916P	P	20030616
			US	2003-484048P	P	20030701
			US	2003-644055	A2	20030819
			US	2003-517915P	P	20031107
			US	2003-526425P	P	20031202
			US	2003-526426P	P	20031202
			US	2004-546017P	P	20040219

OTHER SOURCE(S):

MARPAT 143:477969

GI

$$\begin{array}{c|c} F & NH2 & N & N-Me \\ \hline \\ N & N & N-Me \\ \hline \\ N & N-Me \\ \end{array}$$

The title compds. I [A, B, C, and D = C, N; R1-R3 = H, halo, CN, NO2, etc.; R4 AΒ = H, alkyl; R5-R8 = H, halo, CN, NO2, etc.; R9 = H, (un)substituted alkyl, aryl, etc.; R10 = H], useful for inhibiting fibroblast growth factor receptor 3 or treating a biol. condition mediated by fibroblast growth factor receptor 3, were prepared E.g., a multi-step synthesis of 4-amino-5-fluoro-3-[6-(4methylpiperazin-1-yl)-1H- benzimidazol-2-yl]-1H-quinolin-2-one (II), starting from 5-chloro-2-nitroaniline and 1-methylpiperazine, was given. The majority of the exemplary compds. I displayed an IC50 of less than 10 μM with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1E, Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFR α , and PDGFR β . In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFR α , and PDGFR β with IC50 values of less than 1 μM . The mentioned above compound II was tested in various tests and showed significant antiproliferative activity. II inhibited FGFR3 receptor phosphorylation and ERK phosphorylation in multiple myeloma cell lines with activating FGFR3 mutations.

L4 ANSWER 15 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1223876 CAPLUS Full-text

DOCUMENT NUMBER:

143:477966

TITLE:

Preparation of benzimidazole quinolinones for inhibiting a checkpoint kinase 1 and their use in

combination therapy for cancer

INVENTOR(S): Gesner, Thomas G.; Barsanti, Paul A.; Harrison,

Stephen D.; Ni, Zhi-Jie; Brammeier, Nathan M.; Zhou,

Yasheen; Le, Vincent P. Chiron Corporation, USA

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 249 pp., Cont.-in-part of U.S.

Ser. No. 644,055.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 2005256157	A1	20051117	US 2005-41191		20050121
US 2004092535	A1	20040513	US 2003-644055		20030819
CN 1692112	A	20051102	CN 2003-824565		20030819
US 2005203101	A1	20050915	US 2004-839793		20040505
PRIORITY APPLN. INFO.:			US 2002-405729P	P	20020823
			US 2002-426107P	P	20021113
			US 2002-426226P	P	20021113
			US 2002-426282P	P	20021113
			US 2002\428210P	P	20021121
•			US 2003-460327P	P	20030403
			US 2003-460328P	P	20030403
			US 2003-460493P	P	20030403
			US 2003-4789\6P	P	20030616
			US 2003-484048P	P	20030701
			US 2003-644055	A 2	20030819
			US 2004-538984P	P	20040123

Ι

OTHER SOURCE(S):

CASREACT 143:477966; MARPAT 143:477966

GI

AB

The title compds. [I; A, B, C, D = C, N; R1 = H, halo, CN, NO2, etc.; R2, R3 = H, halo, NO2, CN, etc.; R4 = H, (un) substituted alkyl; R5, R8 = H, (un) substituted alkyl, alkenyl, heterocyclyl; or R5 may be absent if A = N; or R8 may be absent if D = N; R6, R7 = H, halo, NO2, CN, etc.; R9 = H, (un) substituted alkyl, aryl, etc.; R10 = H; or R9 and R10 join together to form one or more rings, each having 5-7 members], useful for inhibiting checkpoint kinase 1, inducing cell cycle progression, and increasing apoptosis in cells, were prepared E.g., a multi-step synthesis of 4-amino-3-(benzimidazol-2-yl)-6-(4-methylpiperazinyl)hydroquinolin-2-one, was given. The compds. I were tested against various kinases. Two of the prepared compds. I, 4-[(3S)-1-azabicyclo[2.2.2]oct-3-ylamino]-3-(1H-benzimidazol-2yl)-6-chloroquinolin-2-(1H)-one and 6-chloro-3-[5-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-4-[(piperidin-2- ylmethyl)amino]quinolin-2(1H)-one, were found to be potent inhibitors of CHK1 with IC50 of 0.32 nM and 0.63 nM, resp. The majority of the exemplary compds. I displayed an IC50 of less than 10 μM with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1E, Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFRα, and PDGFRβ. In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFR α , and PDGFR β with IC50 values of less than 1 μ M. The compds. I may be used to prepare pharmaceutical compns. and may be used in conjunction with DNA damaging agents.

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ANSWER 16 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2005:976928 CAPLUS Full-text
DOCUMENT NUMBER:
                         143:279443
                         4-Amino-3-(benzimidazol-2-yl)quinolin-2-one
TITLE !
                         derivatives for the modulation of inflammatory and
                         metastatic processes
                         Lee, Sang H.; Heise, Carla C.
INVENTOR (S)
PATENT ASSIGNEE(S):
                         Chiron Corporation, USA
SOURCE:
                         PCT Int. Appl., 145 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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PATENT NO. KIND DATE APPLICATION NO. DATE _ _ _ _ 20050909 WO 2005-US5316 20050218 WO 2005082340 **A2** WO 2005082340 Α3 20060504 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, \bigvee P, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2005-216904 20050218 AU 2005216904 Α1 20050909 CA 2005-2556872 20050218 CA 2556872 **A1** 20050909 20050218 20051027 ÚS 2005-61386 US 2005239825 **A**1

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EP 1718306 A2 20061108 EP 2005-723338 20050218 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU PRIORITY APPLN. INFO.: US 2004-546395P P 20040220 Ρ US 2004-547103P 20040223 US 2004-554771P Ρ 20040319 WO 2005-US5316 W 20050218

OTHER SOURCE(S):

MARPAT 143:279443

GI

AB The invention provides methods for using of using 4-Amino-3-(benzimidazol- 2-yl)quinolin-2-one derivs. (Markush included), or a salt or tautomer thereof, in the treatment of disorders relating to cell adhesion and metastatic processes. Preparation of I is included.

L4 ANSWER 17 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:696750 CAPLUS Full-text

DOCUMENT NUMBER:

143:166661

TITLE :

Use of PDGF receptor tyrosine kinase (PDGF-R TK) inhibitors for the treatment of myocarditis and its

complications

INVENTOR (S)

Leipner, Carola; Boehmer, Frank-Dietmar; Gruen, Katja;

Shetty, Suraj Shivappa; Massimini, Giorgio

Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE:

PCT Int. Appl., 19 pp. CQDEN: PIXXD2

DOCUMENT TYPE:

Patent

1

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT N	10.			KINI	ו כ	DATE			APPL:	ICAT:	I NOI	. OI		D	ATE	
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WO 20050	7043	32		A1	:	2005	0804	Ţ	WO 21	905-1	EP749	9		20	050	126
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BOX	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ÆE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	KG,	ΚP,	KR,	KZ,	LC,
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
	NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	√ŞG,	SK,	SL,	SY,
	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YUX	ZA,	ZM,	ZW
RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	, MX	ZW,	AM,
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	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
	MR,	NE,	SN,	TD,	TG											
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PRIORITY APPLN. INFO.:

GB 2004-1761

A 20040127

AB The invention discloses the use of a PDGF-R TK inhibitor, e.g. I, or a pharmaceutically acceptable salt thereof, for the manufacture of pharmaceutical compns. for the treatment of myocarditis and/or its complications.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:629989 CAPLUS Full-text

DOCUMENT NUMBER: 143:452249

TITLE: CHIR-258: A Potent Inhibitor of FLT3 Kinase in

Experimental Tumor Xenograft Models of Human Acute

Т

Myelogenous Leukemia

AUTHOR(S): Lopes de Menezes, Daniel E.; Peng, Jing; Garrett,

Evelyn N.; Louie, Sharianne G.; Lee, Sang H.;

Wiesmann, Marion; Tang, Yan; Shephard, Lee; Goldbeck,

Cheryl; Oei, Yoko; Ye, Helen; Aukerman, Sharon L.;

Heise, Carla

CORPORATE SOURCE: Biopharma Research and Development, Chiron Corp.,

Emeryville, CA, USA

SOURCE: Clinical Cancer Research (2005), 11(14), 5281-5291

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal LANGUAGE: English

Purpose: Fms-like tyrosine kinase 3 (FLT3) encodes a receptor tyrosine kinase (RTK) for which activating mutations have been identified in a proportion of acute myelogenous leukemia (AML) patients and associated with poor clin. prognosis. Given the relevance of FLT3 mutations in AML, we investigated the activity of CHIR-258, an orally active, multitargeted small mol., with potent activity against FLT3 kinase and class III IV, and V RTKs involved in endothelial and tumor cell proliferation in AML models. Exptl. Design: CHIR-258 was tested on two human leukemic cell lines in vitro and in vivo with differing FLT3 mutational status [MV4;11 cells express FLT3 internal tandem duplications (ITD) vs. RS4;11 cells with wild-type (WT) FLT3]. Results: Antiproliferative activity of CHIR-258 against MV4; N was .apprx.24-fold greater compared with RS4;11, indicating more potent inhibition against cells with constitutively activated FLT3 ITD. Dose-dependent down modulation of receptor phosphorylation and downstream signaling [signal transducer and activator of transcription 5 (STAT5) and extracellular signal-regulated kinase (ERK)/mitogen-activated protein kinase] in MV4;11 cells with CHIR-258 confirmed the mol. mechanism of action. Target modulation of phospho-FLT3, phospho-STAT5, and phospho-ERK in MV4;11 tumors was achieved at biol. active

doses of CHIR-258. Tumor regressions and eradication of AML cells from the bone marrow were shown in s.c. and bone marrow engraftment leukemic xenograft models. Tumor responses were characterized by decreased cellular proliferation and pos. immunohistochem. staining for active caspase-3 and cleaved poly(ADP-ribose) polymerase, suggesting cell death was mediated in part via apoptosis. Conclusions: These data indicate that CHIR-258 may be an effective therapy in FLT3-associated AML and warrants clin. trials.

REFERENCE COUNT:

THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS 44 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 19 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN L4ACCESSION NUMBER:

2005:451351 CAPLUS Full-text

DOCUMENT NUMBER:

143:7710

TITLE:

Preparation of benzimidazole quinolinones for inhibiting FGFR3 and treating multiple myeloma

INVENTOR(S):

Cai, Shaopei; Chou, Joyce; Harwood, Eric; Heise, Carla C.; Machajewski, Timothy D.; Ryckman, David; Shang,

APPLICATION NO.

DATE

Xiao; Wiesmann, Marion; Zhu, Shuguang

PATENT ASSIGNEE(S):

Chiron Corporation, USA PCT Int. Appl., 567 pp.

SOURCE:

CODEN: PIXXD2

KIND DATE

MARPAT 143:7710

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

WO	200	50472	44		A2			0526	,	WO 2	004-	US36	956		2	0041	105	
WO	200	50472	44		A 3		2006	1221										
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UΑ,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW	: BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LU,	MC,	NL,	ΡL,	PT,	RO,	
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	4
		ΝE,	SN,	TD,	TG													STATHISIS
AU	200	12896	72		A1			0526								0041		
CA	254	1186			A1			0526					~ _			0041		
US	200	51373	99		A1			0623								0041		
US	200	52092	47		A1		2005	0922		US 2	004-	9825	43		2	0041	105	•
EP	169				A2			0823								0041		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	
		HR,	IS,	YU														
JP	200	75106	65		T		2007	0426			006-					0041		
IORIT	Y AP	PLN.	INFO	.:							003-					0031		
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											003-				P 2			
											004-							
										WO 2	004-	US36	956	,	W 2	0041	105	

GI

OTHER SOURCE(S):

The title compds. I [A, B, C, and D = C, N; R1-R3 = H, halo, CN, NO2, etc.; R4 AB = H, alkyl; R5-R8 = H, halo, CN, NO2, etc.; R9 = H, (un) substituted alkyl, aryl, etc.; R10 = H], useful for inhibiting fibroblast growth factor receptor 3 or treating a biol. condition mediated by fibroblast growth factor receptor 3, were prepared E.g., a multi-step synthesis of 4-amino-5-fluoro-3-[6-(4methylpiperazin-1-yl)-1H- benzimidazol-2-yl]-1H-quinolin-2-one (II), starting from 5-chloro-2-nitroaniline and 1-methylpiperazine, was given. The majority of the exemplary compds. I displayed an IC50 of less than 10 µM with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1E, Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFR α , and PDGFR β . In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFRα, and PDGFRβ with IC50 values of less than 1 μM . The mentioned above compound II was tested in various tests and showed significant antiproliferative activity. II inhibits FGFR3 receptor phosphorylation and ERK phosphorylation in multiple myeloma cell lines with activating FGFR3 mutations.

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L4 ANSWER 20 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:451119 CAPLUS Full-text

DOCUMENT NUMBER: 143:7732

TITLE: Process for preparation of benzimidazolylquinolones by

reaction of aminobenzonitriles with

benzimidazolylacetates.

INVENTOR(S): Cai, Shaopei; Chou, Joyce; Harwood, Eric; Ryckman,

David; Shang, Xiao; Zhu, Shuguang; Machajewski,

Timothy D.

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATE				ICAT					ATE							
WO 2	 005046														0041	
1	W: AE	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN	, co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
	LK	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
	NO	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
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	NE	, SN,	TD,	TG												
AU 2	004288	709		A1		2005	0526		AU 2	004-	2887	09		2	0041	105
	543820			A1		2005	0526		CA 2	004-	2543	820		2	0041	105
US 2	005137	399		A1		2005	0623		US 2	004-	9827	57		2	0041	105
US 2	005209	247		A1		2005	0922		US 2	004-	9825	43		2	0041	105
EP 1	682529			A2		2006	0726		EP 2	004-	8104	68		2	0041	105
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	ΙE	, SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	IS			
CN 1	878766			Α		2006	1213		CN 2	004-	8003	2837		2	0041	105
JP 2	007510	568		T		2007	0426		JP 2	006-	5385	26		2	0041	105
PRIORITY .	APPLN.	INFO	.:						US 2	003-	5179	15P		P 2	0031	107
									US 2	003-	5264	25P		P 2	0031	202
									US 2	003-	5264	26P		P 2	0031	202
									US 2	004-	5460	17P		P 2	0040	219
									WO 2	004-	US37	051		W 2	0041	105
OTHER SOU	RCE(S)	:		CAS	REAC	T 14	3:77	32;	MARP.	AT 1	43:7	732				

Title compds. [I; R1-R4 = H, Cl, Br, F, iodo, OR10, NR11R12, (substituted) alkyl, aryl, alkenyl, alkynyl, heterocyclyl, heterocyclylalkyl; R5-R8 = H, F, Cl, Br, iodo, OR13, NR14R15, SR16, (substituted) alkyl, aryl, alkenyl, alkynyl, heterocyclyl, heterocyclylalkyl, alkoxyalkyl, aryloxyalkyl, heterocyclyloxyalkyl; R10, R13 = (substituted) alkyl, aryl, heterocyclylalkyl, alkoxyalkyl, aryloxyalkyl, heterocyclyloxyalkyl; R11-R16 =

(substituted) alkyl, aryl, heterocyclyl], were prepared by reaction of aminobenzonitriles (II; R1-R4 as above) with benzimidazolylacetates (III; R5-R8 as above; Z = OR9a, NR9bR9c; R9a-R9c = alkyl) in the presence of the Na or K salt of a base. Thus, Et [6-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]acetate (preparation given), 2-amino-6-fluorobenzonitrile, and potassium bis(trimethylsilyl)amide were stirred together in THF at 40-62° for 1 h to give 47.9% 4-amino-5-fluoro-3-[6-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-1H- quinolin-2-one.

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L4
     ANSWER 21 OF 50
                      CAPLUS COPYRIGHT 2007 ACS on STN
                          2005:451118 CAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          143:7709
                          Preparation of benzimidazole quinolinones and lactate
TITLE:
                          salts thereof for inhibiting vascular endothelial
                          growth factor receptor tyrosine kinase
INVENTOR(S):
                          Cai, Shaopei; Chou, Joyce; Harwood, Eric; Machajewski,
                          Timothy D.; Ryckman, David; Shang, Xiao; Zhu, Shuguang
                          Chiron Corporation, USA
PATENT ASSIGNEE(S):
SOURCE:
                          PCT Int. Appl., 215 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                             APPLICATION NO.
                                                                     DATE
     PATENT NO.
                          KIND
                                 DATE
                                 20050526
                                             WO 2004-US36941
                                                                     20041105
                          A2
     WO 2005046589
             AE, AG, AL, AM, AT, AU, AZ, RA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, R\dot{D}_{\chi} SC, SD, SE, SG, SK, SL, SY,
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             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     AU 2004288692
                           A1
                                 20050526
                                             AU 2004-288692
                                                                     20041105
     CA 2544492
                                 20050526
                                             CA 2004-2544492
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                           A1
                                             US 2004-982757
     US 2005137399
                           A1
                                 20050623
                                                                     20041105
                                             US 2004-982543
     US 2005209247
                          A1
                                 20050922
                                                                     20041105
     EP 1699421
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL,
                                                                   SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, NU, PL, SK,
             HR, IS, YU
     BR 2004016143
                                 20070102
                                             BR 2004-16143
                                                                     20041105
PRIORITY APPLN. INFO.:
                                             US 2003-517915P
                                                                     20031107
                                             US 2003-526425P
                                                                  Р
                                                                     20031202
                                             US 2003-526426P
                                                                  Ρ
                                                                     20031202
                                             US 2004-546017P
                                                                  Р
                                                                     20040219
                                             WO 2004-US36941
                                                                     20041105
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CASREACT 143:7709; MARPAT 143:7709

OTHER SOURCE(S):

GI

AB The title compds. I [R1-R4 = H, halo, CN, NO2, etc.; R5-R8 = H, halo, NO2, etc.; R9 = H; R12 = H, alkyl, aryl, heterocyclyl; R13 = H, alkyl, aryl, heterocyclyl, etc.; R14 = H] and their pharmaceutically acceptable lactate salts, useful for inhibiting vascular endothelial growth factor receptor tyrosine kinase, were prepared E.g., a multi-step synthesis of 4-amino-5fluoro-3-[6-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-1H- quinolin-2-one (II) and its lactate salt, starting from 5-chloro-2-nitroaniline and 1methylpiperazine, was given. The pharmaceutically acceptable salts of I have improved aqueous solubility and desirable drug substance properties. Many of the exemplary compds. I displayed an IC50 of less than 10 μM with respect to Flt-1, KDR, PDGF, c-KIT, FLT-3, VEGFR1, VEGFR2, c-Met, CSF-1, FGFR3 and/or In addition, many of the exemplary compds. exhibited IC50 value of less than 10 μM with respect to PDGFR. The 4-amino substituted compds. I such as II were found to be potent inhibitors of various kinases such as VEGFR2 (KDR, Flk-1), FGFR1 and PDGFR β with IC50's ranging from 10-27 nM. FGFR3 receptor phosphorylation and ERK phosphorylation in multiple myeloma cell lines with activating FGFR3 mutations.

I

II

CAPLUS COPYRIGHT 2007 ACS on STN L4ANSWER 22 OF 50 2005:418830 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:221928

TITLE: In vivo Target Modulation and Biological Activity of

CHIR-258, a Multitargeted Growth Factor Receptor

Kinase Inhibitor, in Colon Cancer Models

AUTHOR (S): Lee, Sang Hoon; Lopes de Menezes, Daniel; Vora,

Nayesh; Harris, Alex; Ye, Helen; Nordahl, Lara;

Garrett, Evelyn; Samara, Emil; Aukerman, Sharon Lea;

Gelb, Arnold B.; Heise, Carla

Departments of Pharmacology, and Experimental CORPORATE SOURCE:

> Pathology, Pharmacokinetics and Drug Metabolism, and Applied Biochemistry, Translational Medicine, Chiron

Corp., Emeryville, CA, USA.

Clinical Cancer Research (2005), 11(10), 3633-3641 SOURCE:

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal English LANGUAGE:

AΒ Purpose: To evaluate the therapeutic and biol. effects of CHIR-258, an orally bioavailable, potent inhibitor of class III-V receptor tyrosine kinases, in colon cancer models. Exptl. Design: The pharmacol. activity of CHIR-258 was characterized by monitoring target modulation as well as by evaluating the antitumor and antiangiogenic effects in human colon xenograft models. Results: CHIR-258 inhibits vascular endothelial growth factor receptor 1/2, fibroblast growth factor receptor 1/3, and platelet-derived growth factor receptor β (PDGFR β) and shows both antitumor and antiangiogenic activities in Treatment of KM12L4a human colon cancer cells with CHIR-258 resulted in a dose-dependent inhibition of vascular endothelial growth factor receptor 1 and PDGFR β phosphorylation and reduction of phosphorylated extracellular signal-regulated kinase (ERK) levels, indicating modulation of target receptors and downstream signaling. In vivo administration of CHIR-258 resulted in significant tumor growth inhibition and tumor regressions, including large, established tumors (500-1,000 mm3). Immunohistochem. anal. showed a reduction of phosphorylated PDGFRB and phosphorylated ERK in tumor cells after oral dosing with CHIR-258 compared with control tumors. These changes were accompanied by decreased tumor cell proliferation rate and reduced intratumoral microvessel d. CHIR-258 inhibited the phosphorylation of PDGFRB and ERK.phosphorylation in tumors within 2 h following dosing and the inhibitory activity was sustained for >24 h. Significant antitumor activity was observed with intermittent dosing schedules, indicating a sustained biol. activity. Conclusion: These studies provide evidence that biol. activity of CHIR-258 in tumors correlates with efficacy and aids in the identification of potential biomarkers of this multitargeted receptor tyrosine kinase inhibitor. CHIR-258 exhibits properties that make it a promising candidate for clin. development in a variety of solid and hematol. malignancies.

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:369248 CAPLUS Full-text

DOCUMENT NUMBER: 142:428777

TITLE: Antibodies of fibroblast growth factor receptor-1 and

uses as inhibitors for the treatment of obesity

INVENTOR(S): Sun, Haijur

PATENT ASSIGNEE(S): Imclone Systems Incorporated, USA

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT 1	. 01			KIN	o 1	DATE			APPL:	ICAT:	ION 1	NO.		D	ATE	
					-									-		
WO 2005	0372	35		A 2	:	2005	0428	1	WO 2	004>1	US34 :	970		20	0041	018
WO 2005	0372	35		A3		2005	1222									
W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	₽W,	BY,	BZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG>	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	Ř₽.	KR,	ΚZ,	LC,
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	WΖ,	NA,	NI,
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RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	ΑM,
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	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
	SN,	TD,	TG													

CA 2004-2542638 20050428 20041018 CA 2542638 A1 20060719 EP 2004-796034 20041018 EP 1680140 A2 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR PRIORITY APPLN. INFO.: US 2003-512255P P 20031016 WO 2004-US34970 W 20041018

The present invention is directed to an antibody or fragments thereof that are specific for a fibroblast growth factor receptor (FGFR)-1(IIIb), FGFR-1(IIIc), and/or FGFR-4. Also, provided herein, are vectors and host cells comprising the nucleic acids encoding those antibodies. The present invention further provides methods of antagonizing FGFR-1 or FGFR-4 as a treatment for obesity, diabetes, or a condition related thereto, and methods of reducing food intake.

L4 ANSWER 24 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:295572 CAPLUS Full-text

DOCUMENT NUMBER: 143:591

TITLE CHIR-258, a novel, multitargeted tyrosine kinase inhibitor for the potential treatment of t(4;14)

multiple myeloma

AUTHOR(S): Trudel, Suzanne; Li, Zhi Hua; Wei, Ellen; Wiesmann,

Marion; Chang, Hong; Chen, Christine; Reece, Donna;

Heise, Carla; Stewart, A. Keith

CORPORATE SOURCE. Department of Medical Oncology, Princess Margaret

Hospital and McLaughlin Centre for Molecular Medicine,

University of Toronto, Toronto, ON, Can.

SOURCE: Blood (2005), 105(7), 2941-2948

©QDEN: BLOOAW; ISSN: 0006-4971

PUBLISHER: American Society of Hematology

DOCUMENT TYPE: Journal LANGUAGE: English

The t(4;14) translocation that occurs uniquely in a subset (15%) of patients AB with multiple myeloma (MM) results in the ectopic expression of the receptor Tyr kinase (RTK), fibroblast growth factor receptor 3 (FGFR3). Inhibition of activated FGFR3 in MM cells induces apoptosis, validating FGFR3 as a therapeutic target in t(4;14) MM and encouraging the clin. development of FGFR3 inhibitors for the treatment of these patients, who have a poor prognosis. The authors describe here the characterization of a novel, smallmol. inhibitor of class III, IV, and V RTKs, CHIR-258, as an inhibitor of FGFR3. CHIR-258 potently inhibits FGFR3 with an inhibitory concentration of 50% (IC50) of 5 nM in in vitro kinase assays and selectively inhibited the growth of B9 cells and human myeloma cell lines expressing wild-type (WT) or activated mutant FGFR3. In responsive cell lines, CHIR-258 induced cytostatic and cytotoxic effects. Importantly, addition of interleukin 6(IL-6) or insulin growth factor 1 (IGF-1) or coculture on stroma did not confer resistance to CHIR-258. In primary myeloma cells from t(4;14) patients, CHIR-258 inhibited downstream extracellular signal-regulated kinase (ERK) 1/2 phosphorylation with an associated cytotoxic response. Finally, therapeutic efficacy of CHIR-258 was demonstrated in a xenograft mouse model of FGFR3 MM. These studies support the clin. evaluation of CHIR-258 in MM.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:99470 CAPLUS Full-text DOCUMENT ANDMER: 142:197889

TITLE: Fluoro substituted omega-carboxyaryl diphenyl urea for

treatment of raf, VEGFR, PDGFR, p38 and flt-3

kinase-mediated diseases

INVENTOR(S): Dumas, Jacques; Boyer, Stephen: Riedl, Bernd; Wilhelm,

Scott

PATENT ASSIGNEE(S):

Bayer Pharmaceuticals Corporation, USA

SOURCE:

GI

PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT :	NO.			KINI	D	DATE		j	APPI	LICAT	ION I	NO.		Di	ATE	
WO	2005	0099	61		A2		2005	0203	1	WO 2	2004-1	US23.	500		2	0040	722
WO	2005	0099	61		A3		2005	0331									
WO	2005	0099	61		B1		2005	0602									
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		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RÒχ	RU,	sc,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	υG,	νs,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
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		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA	GN,	GQ,	GW,	ML,	MR,	ΝE,
		SN,	TD,	TG							`						
AU	2004	2597	60		A1		2005	0203		AU 2	2004-	25\97	60		2	0040	722
CA	2532	865			A1		2005	0203		CA 2	2004-	2532	865		2	0040	722
US	2005	0380	80		A1		2005	0217	•	US 2	2004-	8959	8 / 2		2	0040	722
EP	1663	978			A 2		2006	0607		EP 2	2004-	7860	91		2	0040	722
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BR	2004	0122	19		Α		2006	0822		BR 2	2004-	1221	9	\	2	0040	722
CN	1856	469			Α		2006	1101	1	CN 2	2004 -	8002	1091	,	2	0040	722
JP	2006	5281	96		T		2006	1214	1	JP 2	2006-	5212	21		2	0040	722
NO	2006	0008	70		Α		2006	0407		NO 2	2006-	870			15	0060	222
RIORIT	Y APP	LN.	INFO	.:						US 2	2003-	4891	02P]	P 2	Q030	723
										US 2	2004-	5403	26P]		00(40)	
									,	WO 2	2004-1	US23	500	1	W 2	0040	722
THER S	OURCE	(S):			CAS	REAC	T 14	2:19	7889								

Title compound I is prepared I and salts thereof is prepared in several steps from 3-fluoro-4-nitrophenol, 4-chloro-N-methylpyridine-2-carboxamide and 4-chloro-3-(trifluoromethyl)phenylisocyanate. I inhibits PDGFR tyrosine kinase with IC50 = 83 nM. I is useful for the treatment of, e.g., inflammation and as an antiproliferative agent.

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ANSWER 26 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN
L4
                          2004:1059176 CAPLUS Full-text
ACCESSION NUMBER:
                          142:32986
DOCUMENT NUMBER:
                          Use of a c-abl-, PDGFR-, or c-kit-tyrosine kinase
TITLE:
                          inhibitor for the treatment of diabetes
                          Hagerkvist, Robert Per; Welsh, Nils Richard
INVENTOR (S):
PATENT ASSIGNEE (S):
                          Swed.
SOURCE:
                          PCT Int. Appl., 22 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. CQUNT:
PATENT INFORMATION:
     PATENT NO.
                           KIND
                                  DATE
                                               APPLICATION NO.
                                                                       DATE
                                               WO 2004-EP5679
     WO 2004105763
                            A2
                                  20041209
                                                                       20040526
     WO 2004105763
                           A3
                                  20050602
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, NE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
         TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
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     AU 2004243491
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     CA 2526594
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     EP 1631291
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                                               EP 2004 739375
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                                               BR 2004-10704
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                           Α
                                                                       20060622
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     US 2007072932
                                               US 2006-556984
                           Α1
                                                                       20030527
PRIORITY APPLN. INFO.:
                                               GB 2003-12086
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GB 2004-2682

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WO 2004-EP5679

20040206

20040526

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GI

The invention discloses the use of a c-Abl-, PDGFR-, or c-kit-tyrosine kinase AΒ inhibitor, e.g. I, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for the treatment of diabetes, including type I or type II diabetes.

ANSWER 27 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:428803 CAPLUS Full-text

DOCUMENT NUMBER:

141:1211

TITLE:

Methods of treating cancer with a methylpiperazinyl

benzimidazolyl quinolinone and related methods

INVENTOR(S):

Machajewski, Timothy D.; Hannah, Alison; Harwood,

Eric; Haroldsen, Peter; Heise, Carla C.; Samara, Emil;

APPLICATION

Shang, Xiao; Vora, Jayesh; Zhu, Shuguang

PATENT ASSIGNEE(S):

Chiron Corporation, USA

SOURCE:

PCT Int. Appl., 76 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.						KIND DATE		APPLICATION NO.						D	ATE					
- W	10	2004	A2 20040527				WO 2003-US35806						20031112							
W	10	2004043389			A3 2004		2004	0805												
P.	Ю	2004043389			B1		2004	0916				٠								
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												, MN								
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			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN	, GQ	GW,	ML,	MR,	NE,	SN,	TD,	TG	_
C	A	2501	932			A1		2004	0527		CA	2003-	2501	932		2	0031	1 12	APPLICA	21
A	U	2004220196			A1 20041104		AU 2003-290699						20031112			APILCO	15 Eur			
Ü	JS						1104	US 200 706328					20031112							
E	EΡ						EP 2003-783281					20031112			_					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT	LΙ,	LU,	NL,	SE,	MC,	PT,		
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E	BR	2003	0162	29		Α		2005	1004		BR	2003-	1622	9		2	0031	112		
C	CN 1711088			Α		2005	1221	CN 2003-80103178						2	0031	112				
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PRIORI	TY	APP	LN.	INFO	.:						US	2002-	4261	07P		P 2	0021	113		
											US	2002-	4262	04P		P 2	0021	113		
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											US	2003-	4603	28P		P 2	0030	403		
											US	2003-	4603	69P	•	P 2	0030	403	•	
												2003					0030			
												2003					0031			
											WO	2003-	·US35	806	1	₩ 2	0031	112		

AB Methods of treating cancer using 4-amino-5-fluoro-3-[6-(4-methylpiperazin- 1yl)-1H-benzimidazol-2-yl]quinolin-2(1H)-one (I) are provided. In particular, the methods are effective for the treatment of solid tumors or leukemias,

including prostate, colorectal, breast, multiple myeloma, pancreatic, small cell carcinoma, acute myelogenous leukemia, chronic myelogenous leukemia, or myelo-proliferative disease. Further provided are methods of measuring the amount of I and determining a metabolic profile therefore. The growth of both the KM12L4a and MV4;11 xenografts in mice were potently inhibited by I in vivo.

ANSWER 28 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN

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ACCESSION NUMBER:
                         2004:182836 CAPLUS Full-text
DOCUMENT NUMBER:
                         140:235711
                         Preparation of benzimidazole quinolinones for
TITNE:
                         inhibiting a serine/threonine kinase
INVENTOR (S):
                         Barsanti, Paul A.; Bussiere, Dirksen; Harrison,
                         Stephen D.; Heise, Carla C.; Jansen, Johanna M.;
                         Jazan, Elisa; Machajewski, Timothy D.; Mcbride,
                         Christopher; McCrea, William R.; Ng, Simon; Ni,
                         Zhi-Jie; Pecchi, Sabina; Pfister, Keith; Ramurthy,
                         Savithri; Renhowe, Paul A.; Shafer, Cynthia M.;
                         Silver, Joel B.; Wagman, Allan; Weismann, Marion
PATENT ASSIGNEE(S):
                         Chiron Corporation, USA
SOURCE:
                         PCT Int. Appl., 570 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                             APPLICATION NO.
                         KIND
                                                                    DATE
     PATENT NO.
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     WO 2004018419
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US 2003-478916P P 20030616 US 2003-484048P P 20030701 WO 2003-US25990 W 20030819

OTHER SOURCE(S):

MARPAT 140:235711

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The title compds. [I and II; A, B, C, and D = C, N; W, X, Y and Z = C, N and at least one of W, X, Y, and Z = N; R1-R8 = H, halo, CN, NO2, etc.; R9 = H, (un) substituted alkyl, aryl, etc.; R10 = H; or NR9R10 = 5-7 membered ring], useful for inhibiting various enzymes and treating various conditions, were prepared E.g., a multi-step synthesis of 4-amino-3-(benzimidazol-2-yl)-6-(4-methylpiperazinyl) hydroquinolin-2-one, was given. The majority of the exemplary compds. I displayed an IC50 of less than 10 μM with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1ε, Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFRα, and PDGFRβ. In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFRα, and PDGFRβ with IC50 values of less than 1 μM.

L4 ANSWER 29 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003

2003:98039 CAPLUS Full-text

DOCUMENT NUMBER:

138:153534

TITLE:

Preparation of benzimidazolyl-substituted quinolinone derivatives and analogs, with inhibitory action against vascular endothelial growth factor receptor tyrosine kinase, and useful as anticancer agents

INVENTOR(S):

Renhowe, Paul A.; Pecchi, Sabina; Machajewski, Timothy D.; Shafer, Cynthia M.; Taylor, Clarke; McCrea,

William R.; McBride, Christopher; Jazan, Elisa

PATENT ASSIGNEE(S):

Chiron Corporation, USA

U.S. Pat. Appl. Publ., 69 pp., Cont.-in-part of U.S. SOURCE:

Pat. Appl. 2002 107,392.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.	DATE			
US 2003028018 A1 20030206 US 2002-116117				
US 2002 <u>107</u> 392 A1 20020808 US 2001-951265				
US 6605617 B2 20030812				
EP 1650203 A1 20060426 EP 2005-17665	20010911			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, N	NL, SE, MC, PT,			
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003158224 A1 20030821 US 2002-284017	20021030			
US 6774237 B2 20040810				
US 2004006101 A1 20040108 US 2003-387355	20030312			
US 6762194 B2 20040713				
CA 2481055 A1 20031023 CA 2003-2481055	20030404			
WO 2003087095 A1 20031023 WO 2003-US10463	20030404			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, B	BZ, CA, CH, CN,			
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, G				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, K				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, N				
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, T				
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, Z	ZW, AM, AZ, BY,			
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, D				
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, S				
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, N				
AU 2003226275 A1 20031027 AU 2003-226275	20030404			
EP 1497287 A1 20050119 EP 2003-746614	20030404			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, N	NL, SE, MC, PT,			
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, E	EE, HU, SK			
BR 2003008996 A 20050222 BR 2003-8996	20030404			
CN 1659165 A 20050824 CN 2003-812909	20030404			
	20030404			
US 2004097545 A1 20040520 US 2003-613411	20030703			
US 6800760 B2 20041005				
US 2005054672 A1 20050310 US 2004-886950	20040708			
NO 2004004776 A 20041207 NO 2004-4776	20041103			
US 2005209456 A1 20050922 US 2005-92137	20050329			
PRIORITY APPLN. INFO.: US 2000-232159P	P 20000911			
US 2001-951265	A2 20010911			
EP 2001-973722	A3 20010911			
US 2002-116117	A 20020405			
US 2002-284017	A1 20021030			
WO 2003-US10463	W 20030404			
US 2004-886950	A1 20040708			

OTHER SOURCE(S): MARPAT 138:153534

GI

AB Title compds. of formulas I and II are provided [for I: Z = O, S, (un) substituted NH; Y = certain OH derivs., CHO, esters and amides of CO2H, certain NH2 derivs.; R1-R4 = H, halo, cyano, NO2, OH or derivs., NH2 or derivs., (un) substituted amidinyl, quanidinyl, alk(en/yn)yl, aryl, heterocyclyl, CHO, CO2H and esters and amides; R5-R8 = H, halo, NO2, OH or derivs., NH2 or derivs., SH or derivs., cyano, etc.; R9 = H, OH, (un) substituted alkoxy or aryloxy, NH2 or derivs., (un) substituted alkyl or aryl, CHO, alkanoyl, aroyl; for II: A, B, D, E = C or N, with at least one being N; Y = H, OH or derivs., SH or derivs., NH2 or derivs., cyano, various acyl groups, (un) substituted alk(en/yn)yl, aralkyl, heterocycloalkyl, aryl, etc.; R1-R8 = H, halo, NO2, cyano, OH or derivs., NH2 or derivs., acyl, SH or derivs., etc.; R9 = H, OH, (un) substituted alkoxy, aryloxy, NH2 or derivs., aryl, CHO, alkanoyl, aroyl]. Also provided are pharmaceutical formulations including the compds. or their pharmaceutically acceptable salts and a pharmaceutically acceptable carrier, which may be prepared by mixing the compds. or salts with a carrier and water. A disclosed method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient. Claims include tautomers of the compds., pharmaceutically acceptable salts, and pharmaceutically acceptable salts of the tautomers. I and II are inhibitors of receptor tyrosine kinases, and particularly of vascular endothelial growth factor receptor (VEGFR) tyrosine kinase. As such, they are inhibitors of angiogenesis, and thereby act as anticancer agents. Approx 270 invention compds. are listed, with detailed prepns. given for about 50 compds. Several general preparatory methods are discussed in detail. For instance, cyclocondensation of Et 2-(benzimidazol-2yl)acetate with the corresponding ortho-amino nitrile (prepns. given), carried out in refluxing ClCH2CH2Cl in the presence of SnCl4, gave the invention quinolinone III. Many compds. I and II had in vitro IC50 values of less than 10 µM with respect to flt-1 (VEGFR1), KDR (VEGFR2) and bFGF kinases (recombinant, expressed in Sf9 insect cells).

L4 ANSWER 30 OF 50 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:220574 CAPLUS Full-text

DOCUMENT NUMBER:

136:263158

TITLE:

Benzimidazolyl-substituted quinolinone derivatives and

analogs, with inhibitory action against vascular endothelial growth factor receptor tyrosine kinase,

and useful as anticancer agents

INVENTOR(S):

Renhowe, Paul; Pecchi, Sabina; Machajewski, Tim; Shafer, Cynthia; Taylor, Clarke; McCrea, Bill; McBride, Chris; Jazan, Elisa; Wernette-Hammond,

Mary-Ellen; Harris, Alex Chiron Corporation, USA

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 207 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT 1	NO.			KIN	D :	DATE		7	APPL	ICAT:	DATE					
						-											
WO 2002022598					A1		2002	0321	. 1	WO 2	20010911						
WO 2002022598					A8	8 20021121											
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
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                                 20020326
                                             AU 2001-93275
                                                                     20010911
    EP 1317442
                          A1
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                                             EP 2001-973722
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                          B1
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                          A2
    BR 2001013757
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                                 20040302
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                                             JP 2002-526851
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     JP 2004509112
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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                                 20061031
                                             AP 2003-2781
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         W: GM, GH, KE, LS, MW, MZ, SL, SD, SZ, TZ, UG, ZM, ZW
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                                 20070226
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     ZA 2003001578
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                                             IN 2003-KN244
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                                                                     20030310
     NO 2003001097
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Cmax
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                                             BG 2003-107709
     BG 107709
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                                 20040130
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                                             HK 2003-104217
                                                                     20030612
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                                             US 2004~8869<u>5</u>0
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                                             US 2005-92137
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                                 20050602
                                             AU 2005-202068
                                                                     20050513
     AU 2005202068
PRIORITY APPLN. INFO.:
                                             US 2000-232159P
                                                                  P 20000911
                                             AU 2001-293275
                                                                  A3 20010911
                                             EP 2001-973722
                                                                  A3 20010911
                                             US 2001-951265
                                                                  A1 20010911
                                             WO 2001-US42131
                                                                  W
                                                                     20010911
                                             US 2002-284017
                                                                  A1 20021030
                                             US 2004-886950
                                                                  A1 20040708
                         MARPAT 136:263158
OTHER SOURCE(S):
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

GI

Title compds. of formulas I and II are provided [for I: Z = O, S, (un)substituted NH; Y = certain OH derivs., CHO, esters and amides of CO2H, certain NH2 derivs.; R1-R4 = H, halo, cyano, NO2, OH or derivs., NH2 or derivs., (un)substituted amidinyl, guanidinyl, alk(en/yn)yl, aryl, heterocyclyl, CHO, CO2H and esters and amides; R5-R8 = H, halo, NO2, OH or derivs., NH2 or derivs., SH or derivs., cyano, etc.; R9 = H, OH, (un)substituted alkoxy or aryloxy, NH2 or derivs., (un)substituted alkyl or aryl, CHO, alkanoyl, aroyl; for II: A, B, D, E = C or N, with at least one being N; Y = H, OH or derivs., SH or derivs., NH2 or derivs., cyano, various acyl groups, (un)substituted alk(en/yn)yl, aralkyl, heterocycloalkyl, aryl, etc.; R1-R8 = H, halo, NO2, cyano, OH or derivs., NH2 or derivs., acyl, SH or derivs., etc.; R9 = H, OH, (un)substituted alkoxy, aryloxy, NH2 or derivs., aryl, CHO, alkanoyl, aroyl]. Also provided are pharmaceutical formulations

including the compds. or their pharmaceutically acceptable salts and a pharmaceutically acceptable carrier, which may be prepared by mixing the compds. or salts with a carrier and water. A disclosed method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient. Claims include tautomers of the compds., pharmaceutically acceptable salts, and pharmaceutically acceptable salts of the tautomers. I and II are inhibitors of receptor tyrosine kinases, and particularly of vascular endothelial growth factor receptor (VEGFR) tyrosine kinase. As such, they are inhibitors of angiogenesis, and thereby act as anticancer agents. Approx 270 invention compds. are listed, with detailed prepns. given for about 50 compds. Several general preparatory methods are discussed in detail. For instance, cyclocondensation of Et 2-(benzimidazol-2yl) acetate with the corresponding ortho-amino nitrile (prepns. given), carried out in refluxing ClCH2CH2Cl in the presence of SnCl4, gave the invention quinolinone III. Many compds. I and II had in vitro IC50 values of less than 10 µM with respect to flt-1 (VEGFR1), KDR (VEGFR2) and bFGF kinases (recombinant, expressed in Sf9 insect cells).

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

DATE

L4 ANSWER 31 OF 50 USPATFULL on STN

ACCESSION NUMBER: 2007:83463 USPATFULL Full-text

9

TITLE: Use of tyrosine kinase inhibitor to treat diabetes INVENTOR(S): Hagerkvist, Robert Per, Hoganasgatan 7B, Uppsala,

SWEDEN 75330

NUMBER

Welsh, Nils Richard, Uppsala, SWEDEN

PATENT INFORMATION: APPLICATION INFO.:

US 2007072932 A1 20070329 US 2004-556984 A1 20040526 (10) WO 2004-EP5679 20040526

KIND

20060622 PCT 371 date

GB 2004

GB 2004-2682 20040206

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

PRIORITY INFORMATION:

NOVARTIS, CORPORATE INTELLECTUAL PROPERTY, ONE HEALTH

PLAZA 104/3, EAST HANOVER, NJ, 07936-1080, US

NUMBER OF CLAIMS:

8 1-10

EXEMPLARY CLAIM:

1-10

NUMBER OF DRAWINGS:

2 Drawing Page(s)

LINE COUNT:

857

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to the use of a c-Abl-, PDGF-R-, or c-kit- tyrosine kinase inhibitor, e.g. 4-(4-methylpiperazin-1 -ylmethyl)-N-[4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylamino)phenyl]- benzamide, or a pharmaceutically acceptable salt thereof for the manufacture of a medicament for the treatment of diabetes, e.g. type I diabetes, type II diabetes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 32 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2007:30909 USPATFULL Full-text

TITLE:

Multicyclic sulfonamide compounds as inhibitors of histone deacetylase for the treatment of disease INVENTOR(S):

Malecha, James W., San Diego, CA, UNITED STATES Noble, Stewart A., San Diego, CA, UNITED STATES Wiley, Brandon M., Philadelphia, PA, UNITED STATES Hoffman, Timothy Z., San Diego, CA, UNITED STATES Bonnefous, Celine, San Diego, CA, UNITED STATES Sertic, Michael, Euclid, OH, UNITED STATES Wash, Paul L., San Diego, CA, UNITED STATES Smith, Nicholas D., San Diego, CA, UNITED STATES Hassig, Christian A., Mira Mesa, CA, UNITED STATES Scranton, Shawn A., San Diego, CA, UNITED STATES Payne, Joseph E., Oceanside, CA, UNITED STATES Hager, Jeffery, San Diego, CA, UNITED STATES

PATENT ASSIGNEE(S):

KALYPSYS, INC. (U.S. corporation)

NUMBER KIND. DATE

PATENT INFORMATION: APPLICATION INFO.:

US 2007027184 US 2006-496784 A1 20070201 A1 20060727 (11)

DATE NUMBER

PRIORITY INFORMATION:

______ US 2005-704091P

20050729 (60)

US 2006-780129P

20060307 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

INTERNATIONAL PATENT GROUP, ATTN MS LAVERN HALL, P.O.

BOX 38129, ST. LOUIS, MO, 63138, US

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

LINE COUNT:

2549

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed herein are sulfonamide compounds of Formula VII as described AB ##STR1## Methods and compositions are disclosed for treating disease states including, but not limited to cancers, autoimmune diseases, tissue damage, central nervous system disorders, neurodegenerative disorders, fibrosis, bone disorders, polyglutamine-repeat disorders, anemias, thalassemias, inflammatory conditions, cardiovascular conditions, and disorders in which angiogenesis play a role in pathogenesis, using the compounds of the invention. In addition, methods of modulating the activity of histone deacetylase (HDAC) are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 33 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2006:215594 USPATFULL Full-text

TITLE:

Treatment of metastasized tumors

INVENTOR(S):

Menezes, Daniel Lopes De, Emeryville, CA, UNITED STATES

Heise, Carla, Benicia, CA, UNITED STATES Xin, Xiaohua, Palo Alto, CA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Corporation (U.S. corporation)

NUMBER KIND PATENT INFORMATION: A1 20060817 US 2006183750 APPLICATION INFO.: US 2006 342257 A1 20060127 (11)

-METASTASS ZED TUMOR NO AUC OF COME

NUMBER

DATE

PRIORITY INFORMATION: US 2005-647568P 20050127 (60)

US 2005-669245P 20050406 (60) US 2005-722053P 20050929 (60)

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT:

Chiron Corporation, Intellectual Property - R440, P.O. LEGAL REPRESENTATIVE:

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

8 Drawing Page(s)

LINE COUNT:

2547

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods of treating metastatic cancer such as metastasized tumors include administering a compound of Structure I, a tautomer of the compound, a pharmaceutically acceptable salt of the compound, a pharmaceutically acceptable salt or the tautomer, or a mixture thereof to a subject. The compound, tautomer, salt of the compound, salt of the tautomer, or mixture thereof may be used to prepare medicaments for treating metastatic cancer.

The variable A has the values defined herein. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 34 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2006:159951 USPATFULL Full-text

TITLE:

Use of sulfonamide-including compounds in combination

with angiogenesis inhibitors

INVENTOR(S):

Owa, Takashi, Tsukuba-shi, JAPAN Ozawa, Yoichi, Tsukuba-shi, JAPAN Semba, Taro, Tsukuba-shi, JAPAN

PATENT ASSIGNEE (S):

Eisai Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

KIND NUMBER

PATENT INFORMATION: APPLICATION INFO .:

US 2006135486 A1 20060622 US 2005-226655 A1 20050913 (11)

> NUMBER DATE -----

PRIORITY INFORMATION:

20050228 JP 2005-54150 JP 2005-54475 20050228

US 2004-609452P

2004093 (60)

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY,

10150-5257, US

NUMBER OF CLAIMS:

52

EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT:

3301

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to pharmaceutical compositions comprising a sulfonamide-including compound in combination with an angiogenesis

inhibitor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 35 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2005:299638 USPATFULL Full-text

TITLE:

Inhibition of FGFR3 and treatment of multiple myeloma

INVENTOR(S):

Cai, Shaopei, Seattle, WA, UNITED STATES Chou, Joyce, El Cerrito, CA, UNITED STATES Harwood, Eric, Seattle, WA, UNITED STATES Heise, Carla C., Benicia, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES

Ryckman, David, Bellevue, WA, UNITED STATES Shang, Xiao, Bellevue, WA, UNITED STATES Wiesmann, Marion, Brisbane, CA, UNITED STATES Zhu, Shuguang, Shoreline, WA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Corporation (U.S. corporation)

- IMIBITAL FGF3): NO MICOT CALL NUMBER KIND DATE _____ A1 20051124

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

US 2005261307 US 2004-983174 A1 20041105 (10)

Continuation-in-part of Ser. No. US 2003-644055, filed

on 19 Aug 2003, PENDING

NUMBER DATE US 2003-517915P 20031107 (60) PRIORITY INFORMATION: US 2003-526426P 20031202 (60) US 2003-526425P 20031202 (60) US 2004-546017P 20040219 (60) US 2002-405729P 20020823 (60) US 2002-426107P 20021113 (60) US 2002-426226P 20021113 (60) US 2002-426282P 20021113 (60) US 2002-428210P 20021121 (60) US 2003-460328P 20030403 (60) US 2003-460493P 20030403 (60) US 2003-460327P 20030403 (60) US 2003-478916P 20030616 (60) US 2003-484048P 20030701 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS:

28 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

34 Drawing Page(s)

LINE COUNT:

17221

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods of inhibiting fibroblast growth factor receptor 3 and treating various conditions mediated by fibroblast growth factor receptor 3 are provided that include administering to a subject a compound of Structure I, a pharmaceutically acceptable salt thereof, a tautomer thereof, or a pharmaceutically acceptable salt of the tautomer. Compounds having the Structure I have the following structure where and have the variables described herein. Such compounds may be used to prepare medicaments for use in inhibiting fibroblast growth factor receptor 3 and for use in treating conditions mediated by fibroblast growth factor receptor 3 such as multiple ##STR1## myeloma.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 36 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2005:293608 USPATFULL Full-text

TITLE:

Combination therapy with CHK1 inhibitors

INVENTOR (S):

Gesner, Thomas G., Kensington, CA, UNITED STATES Barsanti, Paul A., Pleasant Hill, CA, UNITED STATES Harrison, Stephen D., Albany, CA, UNITED STATES

Ni, Zhi-Jie, Fremont, CA, UNITED STATES

Brammeier, Nathan M., Walnut Creek, CA, UNITED STATES

Zhou, Yasheen, Moraga, CA, UNITED STATES

Le, Vincent P., San Francisco, CA, UNITED STATES

CHIRON CORPORATION (U.S. corporation)

PATENT ASSIGNEE(S):

PATENT INFORMATION: US 2005256157 A1 20051117
APPLICATION INFO.: US 2005-41191 A1 20050121 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-644055, filed

on 19 Aug 2003, PENDING

NUMBER DATE --- -----_____ PRIORITY INFORMATION: US 2004-538984P 20040123 (60) US 2002-405729P 20020823 (60) US 2002-426282P 20021113 (60) 20021113 (60) US 2002-426107P US 2002-426226P 20021113 (60) US 2002-428210P 20021121 (60) US 2003-460493P 20030403 (60) US 2003-460328P 20030403 (60) 20030403 (60) US 2003-460327P 20030616 (60) US 2003-478916P 20030701 (60) US 2003-484048P

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS: 32 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 28 Drawing Page(s)

LINE COUNT: 16679

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds of Structure I, and salts, tautomers, stereoisomers, and mixtures thereof may be used in methods of inhibiting checkpoint kinase 1 in subjects, in methods for inducing cell cycle progression, and in methods for increasing apoptosis in cells. Such compounds may be used to prepare pharmaceutical compositions and may be used in conjunction with DNA damaging

agents. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 37 OF 50 USPATFULL on STN

ACCESSION NUMBER: 2005:275261 USPATFULL Full-text

TITLE: Modulation of inflammatory and metastatic processes

INVENTOR(S): Heise, Carla, Benicia, CA, UNITED STATES

Lee, Sang H., Waltham, MA, UNITED STATES

PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

 NUMBER DATE

PRIORITY INFORMATION: US 2004-546395P 20040220 (60)

US 2004-547103P 20040223 (60) US 2004-554771P 20040319 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS: 39 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 5172

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of using compounds having Structure I or the salts or tautomers of the compounds in the treatment of disorders relating to cell adhesion and metastatic processes are presented herein. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 38 OF 50 USPATFULL on STN

ACCESSION NUMBER: 2005:241451 USPATFULL Full-text

TITLE: Quinolinone derivatives

INVENTOR(S): Renhowe, Paul A., Danville, CA, UNITED STATES

Shafer, Cynthia M., Moraga, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES

Pecchi, Sabina, Oakland, CA, UNITED STATES

McBride, Christopher, Oakland, CA, UNITED STATES

PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

PATENT INFORMATION: US APPLICATION INFO.:

OS 2005-92137 A1 20050329 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2004-886950, filed on 8 Jul

2004, PENDING Continuation of Ser. No. US 2002-284017, filed on 30 Oct 2002, GRANTED, Pat. No. US 6774237 Continuation of Ser. No. US 2001-951265, filed on 11

Sep 2001, GRANTED, Pat. No. US 6605617

NUMBER DATE

PRIORITY INFORMATION: US 2000-232159P 20000911 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662 8097, US

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: 1

LINE COUNT: 5434

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method for synthesizing a 4-amino substituted quinolinone includes reacting a substituted or unsubstituted 2-benzimidazolyl-2-acetate with a substituted or unsubstituted 2-aminobenzonitrile in the presence of a base or an acid. A 4-amino substituted quinolinone compound is formed by the reaction, and the 4-amino substituted quinolinone compound comprises a benzimidazole group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 39 OF 50 USPATFULL on STN

ACCESSION NUMBER: 2005:241242 USPATFULL Full-text

TITLE: Pharmaceutically acceptable salts of quinolinone

compounds having improved pharmaceutical properties

Cai, Shaopei, Seattle, WA, UNITED STATES INVENTOR(S):

Chou, Joyce, El Cerrito, CA, UNITED STATES Harwood, Eric, Seattle, WA, UNITED STATES

Machajewski, Timothy, Martinez, CA, UNITED STATES

Ryckman, David, Bellevue, WA, UNITED STATES Shang, Xiao, Bellevue, WA, UNITED STATES Zhu, Shuguang, Shoreline, WA, UNITED STATES

Okhamafe, Augustus O., Concord, CA, UNITED STATES

Tesconi, Marc S., Monroe, NY, UNITED STATES

PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

> NUMBER KIND DATE

PATENT INFORMATION: US 2005209247-A1 US 2004/982543 APPLICATION INFO.:

A1

20050922 20041105 (10) NO ANC 11 Cma

NUMBER DATE ______ PRIORITY INFORMATION: US 2003-517915P 20031107 (60)

> US 2003-526425P 20031202 (60) 20031202 (60) US 2003-526426P US 2004-546017P 20040219 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS: 45 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 18 Drawing Page(s)

LINE COUNT: 7116

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A lacate salt of a compound of Formula I or a tautomer of the compound, wherein Formula I has the following structure and R.sup.1-R.sup.9 and

R.sup.12-R.sup.14 are as defined herein ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 40 OF 50 USPATFULL on STN

2005:234162 USPATFULL Full-text ACCESSION NUMBER:

Benzimidazole quinolinones and uses thereof TITLE:

Barsanti, Paul A., Pleasant Hill, CA, UNITED STATES INVENTOR(S):

Bussiere, Dirksen, San Leandro, CA, UNITED STATES Harrison, Stephen D., Albany, CA, UNITED STATES Heise, Carla C., Benicia, CA, UNITED STATES

Jansen, Johanna M., San Francisco, CA, UNITED STATES

Jazan, Elisa, Berkeley, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES McCrea, William R. JR., Berkeley, CA, UNITED STATES

Ng, Simon, Walnut Creek, CA, UNITED STATES Ni, Zhi-Jie, Fremont, CA, UNITED STATES Pecchi, Sabina, Oakland, CA, UNITED STATES Pfister, Keith B., San Ramon, CA, UNITED STATES Ramurthy, Savithri, Walnut Creek, CA, UNITED STATES

Renhowe, Paul A., Danville, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES Silver, Joel B., Santa Cruz, CA, UNITED STATES

Wagman, Allan S., Belmont, CA, UNITED STATES Wiesmann, Marion, Brisbane, CA, UNITED STATES

Wayman, Kelly, San Rafael, CA, UNITED STATES

Chiron Corporation (U.S. corporation) PATENT ASSIGNEE(S):

- COMPOSETION COMPRESTAL . **----**US 2005203101 A1 20050915 BCOOD SERVING + US 2004 839793 A1 20040505 (10) Las That Comps. PATENT INFORMATION:

NUMBER KIND DATE

APPLICATION INFO.: Continuation of Ser. No. US 2003-644055, filed on 19 Auc RELATED APPLN. INFO.:

Aug 2003, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2002-405729P 20020823 (60)

> US 2002-426107P 20021113 (60) US 2002-426226P 20021113 (60)

> US 2002-426282P 20021113 (60)

US 2002-428210P 20021121 (60) US 2003-460328P 20030403 (60) US 2003-460493P 20030403 (60)

20030403 (60) US 2003-460327P US 2003-478916P 20030616 (60)

US 2003-484048P 20030701 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

Chiron Corporation, Intellectual Property - R440, P.O. LEGAL REPRESENTATIVE:

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Page(s)

LINE COUNT: 14866

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods of treating cancer include contacting a cancer cell with 4-amino-5fluoro-3-(5-piperazin-1-yl-1H-benzimidazol-2-yl)quinolin-2(1H)- one, 4amino-5-fluoro-3-[5-(4-methyl-4-oxidopiperazin-1-yl)-1H- benzimidazol-2yl]quinolin-2(1H)-one, tautomers thereof, pharmaceutically acceptable salts thereof, pharmaceutically acceptable salts of the tautomers thereof, or a

mixture thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 41 OF 50 USPATFULL on STN L4

ACCESSION NUMBER: 2005:159189 USPATFULL Full-text

TITLE: Methods for synthesizing quinolinone compounds

Cai, Shaopei, Seattle, WA, UNITED STATES INVENTOR(S): Chou, Joyce, El Cerrito, CA, UNITED STATES Harwood, Eric, Seattle, WA, UNITED STATES

Machajewski, Timothy, Martinez, CA, UNITED STATES

Ryckman, David, Bellevue, WA, UNITED STATES Shang, Xiao, Bellevue, WA, UNITED STATES Zhu, Shuguang, Shoreline, WA, UNITED STATES

Okhamafe, Augustus O., Concord, CA, UNITED STATES

Tesconi, Marc S., Monroe, NY, UNITED STATES

PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

NUMBER KIND -----

PATENT INFORMATION:

US 2005137399 **A1** 20050623

APPLICATION INFO.:

US 2004-982757 . A1

20041105 (10)

NUMBER DATE

PRIORITY INFORMATION:

US 2003-517915P 20031107 (60)

US 2003-526425P 20031202 (60) US 2003-526426P 20031202 (60)

US 2004-546017P 20040219 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

LINE COUNT:

2006

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A method of synthesizing a substituted or unsubstituted 4-amino-3benzimidazolyl quinolinone compound includes reacting a first compound having the formula I with a second compound having the formula II in a suitable solvent in the presence of a sodium or potassium salt of a base. The first compound and the second compound have the following structures where the variables have the values described herein: ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 42 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2005:63630 USPATFULL Full-text

TITLE:

Quinolinone derivatives

INVENTOR(S):

Renhowe, Paul A., Danville, CA, UNITED STATES

Pecchi, Sabina, Oakland, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

Taylor, Clarke, Albany, CA, UNITED STATES

McCrea, William R., Berkeley, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES

Jazan, Elisa, Richmond, CA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Corporation (U.S. corporation)

- Supra 1 KIND DATE ------

PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

US 2005054672 A1 20050310 US 2004-886950 A1 20040708 (10)

Continuation of Ser. No. US 2002-284017, filed on 30 Oct 2002, GRANTED, Pat. No. US 6774237 Continuation of Ser. No. US 2001-951265, filed on 11 Sep 2001, GRANTED,

Pat. No. US 6605617

NUMBER DATE ______

PRIORITY INFORMATION:

US 2000-232159P

20000911 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Young J. Suh, Chiron Corporation, P.O. Box 8097,

Emeryville, CA, 94662

NUMBER OF CLAIMS:

16

EXEMPLARY CLAIM: 5757 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Organic compounds having the formula I are provided where the variables have AΒ the values described herein. ##STR1##

Pharmaceutical formulations include the organic compounds or pharmaceutically acceptable salts thereof and a pharmaceutically acceptable carrier and may be prepared by mixing the organic compounds or pharmaceutically acceptable salts of the organic compounds with a carrier and water. A method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient in need thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 43 OF 50 USPATFULL on STN

ACCESSION NUMBER: 2005:44347 USPATFULL Full-text

Fluoro substituted omega-carboxyaryl diphenyl urea for TITLE: the treatment and prevention of diseases and conditions

Boyer, Stephen, Hilden, GERMANY, FEDERAL REPUBLIC OF INVENTOR (S)?

Dumas, Jacques, Bethany, CT, UNITED STATES

Riedl, Bernd, Wuppertal, GERMANY, FEDERAL REPUBLIC OF

Wilhelm, Scott, Orange, CT, UNITED STATES

NUMBER KIND DATE _____

US 2005038080 PATENT INFORMATION: A1 20050217

20040722 (10) APPLICATION INFO.: US 2004-895985 A1

NUMBER

PRIORITY INFORMATION: US 2003-489102P 20030723 (60)

> 20040202 (60) US 2004-540326P

Utility DOCUMENT TYPE: FILE SEGMENT: APPLICATION

MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON LEGAL REPRESENTATIVE:

BLVD., SUITE 1400, ARLINGTON, VA, 22201

NUMBER OF CLAIMS: 54 EXEMPLARY CLAIM: LINE COUNT: 2492

CAS INDEXING IS AVAILABLE FOR THIS PATENT. A compound of Formula (I): ##STR1##

> salts thereof, prodrugs thereof, metabolites thereof, pharmaceutical compositions containing such a compound, and use of such compound and compositions to treat diseases mediated by raf, VEGFR, PDGFR, p38 and flt-3.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 44 OF 50 USPATFULL on STN

ACCESSION NUMBER: 2004:280895 USPATFULL Full-text

TITLE: Methods of treating cancer and related methods Hannah, Alison, Sebastopol, CA, UNITED STATES INVENTOR(S): Harwood, Eric, Seattle, WA, UNITED STATES

Haroldsen, Peter, Pacifica, CA, UNITED STATES

Heise, Carla, Benecia, CA, UNITED STATES

Machajewski, Timothy, Martinez, CA, UNITED STATES

Samara, Emil, Danville, CA, UNITED STATES Shang, Xiao, Bellevue, WA, UNITED STATES Vora, Jayesh, Martinez, CA, UNITED STATES Zhu, Shuguang, Seattle, WA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Corporation (U.S. corporation)

NUMBER KIND

PATENT INFORMATION: APPLICATION INFO.:

US 2004220196 A1 20041104 APPLICATION US 2003 706328 A1 20031112

(10)

NUMBER DATE _____

US 2003-460369P 20030403 (60) PRIORITY INFORMATION: US 2003-460493P 20030403 (60)

US 2003-460328P 20030403 (60) US 2002-426204P 20021113 (60) US 2002-426282P 20021113 (60) US 2002-426107P 20021113 (60)

US 2003-517915P 20031107 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 2045

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods of treating cancer using 4-amino-5-fluoro-3-[6-(4-methylpiperazin-1 AB -yl)-1H-benzimidazol-2-yl]quinolin-2(1H)-one are provided. In particular, the methods are effective for the treatment of solid tumors or leukemias, including prostate, colorectal, breast, multiple myeloma, pancreatic, small cell carcinoma, acute myelogenous leukemia, chronic myelogenous leukemia, or myelo-proliferative disease. Further provided are methods of measuring the amount of 4-amino-5-fluoro-3-[6-(4-methylpiperazin-1 -yl)-1H-benzimidazol-2yl]quinolin-2(1H)-one and determining a metabolic profile therefore.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 45 OF 50 USPATFULL on STN L4

2004:127561 USPATFULL Full-text ACCESSION NUMBER:

Quinolinone derivatives TITLE:

Renhowe, Paul A., Danville, CA, UNITED STATES INVENTOR(S): Pecchi, Sabina, Oakland, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES

Shafer, Cynthia M., El Sobrante, CA, UNITED STATES Taylor, Clarke, Ann Arbor, MI, UNITED STATES

McCrea, William R., JR., Berkeley, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES

Jazan, Elisa, Richmond, CA, UNITED STATES

NUMBER KIND DATE ______ US 2004097545 US 6800760 A1 PATENT INFORMATION: 20040520 US 6800760 B2 US 2003-613411 A1 20041005 20030703 (10) APPLICATION INFO.:

METHOD USEND GENUS - GENUS DOSS NOT ENCOMPAGE COMPTIMED. NO ANC OF COME

RELATED APPLN. INFO.: Division of Ser. No. US 2001-951265, filed on 11 Sep

2001, GRANTED, Pat. No. US 6605617

NUMBER DATE -----

PRIORITY INFORMATION:

US 2000-232159P 20000911 (60)

Utility

DOCUMENT TYPE:

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Chiron Corporation, Intellectual Property, P.O. Box

8097, Emeryville, CA, 94662-8097

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

37 1

LINE COUNT:

6582

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Organic compounds having the formulas I and II are provided where the ΔR

variables have the values described herein.

Pharmaceutical formulations include the organic compounds or pharmaceutically acceptable salts thereof and a pharmaceutically acceptable carrier and may be prepared by mixing the organic compounds or pharmaceutically acceptable salts of the organic compounds with a carrier and water. A method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient in need thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

T.4 ANSWER 46 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2004:121119 USPATFULL Full-text

TITLE:

Benzimidazole guinolinones and uses thereof

INVENTOR(S):

Barsanti, Paul A., Walnut Creek, CA, UNITED STATES Bussiere, Dirksen, San Leandro, CA, UNITED STATES Harrison, Stephen D., Albany, CA, UNITED STATES Heise, Carla C., Benicia, CA, UNITED STATES

Jansen, Johanna M., San Francisco, CA, UNITED STATES

Jazan, Elisa, Richmond, CA, UNITED STATES

Michajewski, Timothy D., Martinez, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES McCrea, William R., JR., Berkeley, CA, UNITED STATES

Ng, Simon, Walnut Creek, CA, UNITED STATES Ni, Zhi-Jie, Fremont, CA, UNITED STATES Pecchi, Sabina, Oakland, CA, UNITED STATES

Pfister, Keith B., San Ramon, CA, UNITED STATES Ramurthy, Savithri, Walnut Creek, CA, UNITED STATES

Renhowe, Paul A., Danville, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

Silver, Joel B., Concord, NH, UNITED STATES Wagman, Allan S., Belmont, CA, UNITED STATES Wiesmann, Marion, Brisbane, CA, UNITED STATES

PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

> -SUPMA A NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.:

20040513 US 2004092535-A1 AI US 2003 644055 20030819

> NUMBER DATE

PRIORITY INFORMATION: US 2002-405729P 20020823 (60)

> US 2002-426107P 20021113 (60) 20021113 (60) US 2002-426226P US 2002-426282P 20021113 (60) US 2002-428210P 20021121 (60)

> 20030403 (60) US 2003-460328P US 2003-460493P 20030403 (60) 20030403 (60) US 2003-460327P

> US 2003-478916P 20030616 (60) US 2003-484048P 20030701 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

Chiron Corporation, Intellectual Property - R440, P.O. LEGAL REPRESENTATIVE:

Box 8097, Emeryville, CA, 94662-8097

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 14 Drawing Page(s)

LINE COUNT: 18050

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods of inhibiting various enzymes and treating various conditions are provided that include administering to a subject a compound of Structure I or IB, a pharmaceutically acceptable salt thereof, a tautomer thereof, or a pharmaceutically acceptable salt of the tautomer. Compounds having the Structure I and IB have the following structures and have the variables described herein. Such compounds may be used to prepare medicaments for use in inhibiting various enzymes and for use in treating conditions mediated by such enzymes. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 47 OF 50 USPATFULL on STN

2004:7861 USPATFULL Full-text ACCESSION NUMBER:

Quinolinone derivatives TITLE:

Renhowe, Paul A., Danville, CA, UNITED STATES INVENTOR(S):

Pecchi, Sabina, Oakland, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

Taylor, Clarke, Ann Arbor, MI, UNITED STATES

McCrea, William R., JR., Berkeley, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES

Jazan, Eliza, Richmond, CA, UNITED STATES

CHIRON CORPORATION (U.S. corporation) PATENT ASSIGNEE(S):

KIND NUMBER -----PATENT INFORMATION: US 2004006101 A1 20040108

US 6762194 B2 20040713 APPLICATION INFO.: US 2003 387355 **A1** 20030312 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-284017, filed on 30

Oct 2002, PENDING Continuation of Ser. No. US

2001-951265, filed on 11 Sep 2001, GRANTED, Pat. No. US

DATE

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COMPOSTIONES

6605617

NUMBER DATE ---------

PRIORITY INFORMATION: US 2000-232159P 20000911 (60)

Utility DOCUMENT TYPE: FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Steven W. Collier, Chiron Corporation, P.O. Box 8097, Emeryville, CA, 94662

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1

5740

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Organic compounds having the formulas I and II are provided where the variables have the values described herein.

Pharmaceutical formulations include the organic compounds or pharmaceutically acceptable salts thereof and a pharmaceutically acceptable carrier and may be prepared by mixing the organic compounds or pharmaceutically acceptable salts of the organic compounds with a carrier and water. A method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient in need thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 48 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2003:226411 USPATFULL Full-text

TITLE:

Quinolinone derivatives

INVENTOR(S):

Renhowe, Paul A., Danville, CA, UNITED STATES Pecchi, Sabina, Oakland, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

Taylor, Clarke, Ann Arbor, MI, UNITED STATES

McCrea Jr, William R., Berkeley, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES

Jazan, Elisa, Richmond, CA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Corporation (U.S. corporation)

DATE NUMBER KIND -----US 2003158224 A1 20030821 US 6774237) B2 20040810

APPLICATION INFO.:

PATENT INFORMATION:

US 2002-284017 **A1**

20021030 (10)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2001-951265, filed on 11

Sep 2001, PENDING

NUMBER DATE

PRIORITY INFORMATION:

US 2000-232159P 20000911 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Steven W. Collier, Chiron Corporation, P.O. Box 8097,

Emeryville, CA, 94662

NUMBER OF CLAIMS:

43

EXEMPLARY CLAIM:

LINE COUNT:

5881

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Organic compounds having the formulas I and II are provided where the variables have the values described herein. ##STR1##

Pharmaceutical formulations include the organic compounds or pharmaceutically acceptable salts thereof and a pharmaceutically acceptable carrier and may be prepared by mixing the organic compounds or pharmaceutically acceptable salts of the organic compounds with a carrier

and water. A method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient in need thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 49 OF 50 USPATFULL on STN

2003:38371 USPATFULL Full-text ACCESSION NUMBER:

TITLE:

Quinolinone derivatives

INVENTOR(S):

Renhowe, Paul A., Danville, CA, UNITED STATES

Pecchi, Sabina, Oakland, CA, UNITED STATES

Machajewski, Timothy D, Martinez, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

Taylor, Clarke, Ann Arbor, MI, UNITED STATES

McCrea, William R., JR., Berkeley, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES

Jazan, Elisa, Richmond, CA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Coporation (U.S. corporation)

KIND DATE NUMBER

PATENT INFORMATION:

CANCER KINASE W/ US 2003028018 A1 20030206 TINGTHE EL US 2002 (16117) A1 20020405 (10) GENUS.

APPLICATION INFO.: RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2001-951265, filed

on 11 Sep 2001, PENDING

NUMBER

DATE -----

PRIORITY INFORMATION:

US 2000-232159P 20000911 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Chiron Corporation, Intellectual Property Law Dept., PO

Box 8097, Emeryville, CA, 94662

NUMBER OF CLAIMS:

37

EXEMPLARY CLAIM:

1

LINE COUNT:

6573

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ Organic compounds having the formulas I and II are provided where the

variables have the values described herein. ##STR1##

Pharmaceutical formulations include the organic compounds or pharmaceutically acceptable salts thereof and a pharmaceutically acceptable carrier and may be prepared by mixing the organic compounds or pharmaceutically acceptable salts of the organic compounds with a carrier and water. A method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient in need thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 50 OF 50 USPATFULL on STN

ACCESSION NUMBER:

2002:199281 USPATFULL Full-text

TITLE:

Quinolinone derivatives

INVENTOR(S):

Renhowe, Paul A., Danville, CA, UNITED STATES Pecchi, Sabina, Oakland, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

Taylor, Clarke, Ann Arbor, MI, UNITED STATES McCrea, William R., JR., Berkeley, CA, UNITED STATES McBride, Christopher, Oakland, CA, UNITED STATES Jazan, Elisa, Richmond, CA, UNITED STATES

DATE

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PATENT INFORMATION:

_____ US 2002107392 A1 20020808

APPLICATION INFO.:

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20030812

20010911 (9)

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INSTITUT CAPP. NO MIC US 2001-951265 A1

KIND

NUMBER DATE

PRIORITY INFORMATION:

US 2000-232159P Utility

NUMBER

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

David Lentini, CHIRON CORPORATION, 4560 Horton Street,

20000911 (60)

Emeryville, CA, 94608-2916

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

LINE COUNT:

6588

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Organic compounds having the formulas I and II are provided where the

variables have the values described herein. ##STR1##

Pharmaceutical formulations include the organic compounds or pharmaceutically acceptable salts thereof and a pharmaceutically acceptable carrier and may be prepared by mixing the organic compounds or pharmaceutically acceptable salts of the organic compounds with a carrier and water. A method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient in need thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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2 L4 AND "AUC"

=> d 15 1-2 ibib, abs, hitstr

ANSWER 1 OF 2 USPATFULL on STN

ACCESSION NUMBER:

INVENTOR(S):

2005:299638 USPATFULL Full-text

TITLE:

Inhibition of FGFR3 and treatment of multiple myeloma

Cai, Shaopei, Seattle, WA, UNITED STATES Chou, Joyce, El Cerrito, CA, UNITED STATES Harwood, Eric, Seattle, WA, UNITED STATES Heise, Carla C., Benicia, CA, UNITED STATES

Machajewski, Timothy D., Martinez, CA, UNITED STATES

Ryckman, David, Bellevue, WA, UNITED STATES Shang, Xiao, Bellevue, WA, UNITED STATES Wiesmann, Marion, Brisbane, CA, UNITED STATES Zhu, Shuguang, Shoreline, WA, UNITED STATES

PATENT ASSIGNEE(S):

Chiron Corporation (U.S. corporation)

KIND NUMBER DATE _____

PATENT INFORMATION:

US 2005261307

A1 20051124

NUCTIVE MISCONE

APPLICATION INFO .:

US 2004-983174

A1 20041105 (10)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2003-644055, filed

on 19 Aug 2003, PENDING

	NUMBER	DATE		
PRIORITY INFORMATION:	US 2003-517915P	20031107	(60)	
	US 2003-526426P		(60)	
•	US 2003-526425P	20031202	(60)	
	US 2004-546017P	20040219	(60)	
	US 2002-405729P	20020823	(60)	
	US 2002-426107P	20021113	(60)	
	US 2002-426226P	20021113	(60)	
	US 2002-426282P	20021113	(60)	
	US 2002-428210P	20021121	(60)	
	US 2003-460328P	20030403	(60)	
	US 2003-460493P	20030403	(60)	
	US 2003-460327P	20030403	(60)	
	US 2003-478916P	20030616	(60)	
	US 2003-484048P	20030701	(60)	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	Chiron Corporation, Intellectual Property - R44			
	Box 8097 Emergyil	ിക സ്മ 9/	1662-8097 IIS	

40, P.O.

Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS:

28

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

34 Drawing Page(s)

LINE COUNT:

17221

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of inhibiting fibroblast growth factor receptor 3 and treating various conditions mediated by fibroblast growth factor receptor 3 are provided that include administering to a subject a compound of Structure I, a pharmaceutically acceptable salt thereof, a tautomer thereof, or a pharmaceutically acceptable salt of the tautomer. Compounds having the Structure I have the following structure where and have the variables described herein. Such compounds may be used to prepare medicaments for use in inhibiting fibroblast growth factor receptor 3 and for use in treating conditions mediated by fibroblast growth factor receptor 3 such as multiple myeloma. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 405169-16-6P

(preparation of benzimidazole quinolinones for inhibiting FGFR3 and treating

multiple myeloma)

RN 405169-16-6 USPATFULL

2(1H)-Quinolinone, 4-amino-5-fluoro-3-[6-(4-methyl-1-piperazinyl)-1H-CN benzimidazol-2-yl]- (CA INDEX NAME)

ANSWER 2 OF 2 USPATFULL on STN

ACCESSION NUMBER: 2004:280895 USPATFULL Full-text

TITLE: Methods of treating cancer and related methods INVENTOR(S): Hannah, Alison, Sebastopol, CA, UNITED STATES

Harwood, Eric, Seattle, WA, UNITED STATES Haroldsen, Peter, Pacifica, CA, UNITED STATES

Heise, Carla, Benecia, CA, UNITED STATES

Machajewski, Timothy, Martinez, CA, UNITED STATES

Samara, Emil, Danville, CA, UNITED STATES Shang, Xiao, Bellevue, WA, UNITED STATES Vora, Jayesh, Martinez, CA, UNITED STATES Zhu, Shuguang, Seattle, WA, UNITED STATES

PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

NUMBER

NUMBER KIND DATE

PATENT INFORMATION: US 2004220196-AI 20041104 APPLICATION INFO.:

US 2003(-706328) Α1 20031112 (10)

DATE

-----US 2003-460369P 20030403 (60) US 2003-460493P 20030403 (60) US 2003-460328P 20030403 (60) US 2002-426204P 20021113 (60) US 2002-426282P 20021113 (60) US 2002-426107P 20021113 (60) US 2003-517915P 20031107 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O.

Box 8097, Emeryville, CA, 94662-8097

NUMBER OF CLAIMS: 58 EXEMPLARY CLAIM:

PRIORITY INFORMATION:

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 2045

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of treating cancer using 4-amino-5-fluoro-3-[6-(4- methylpiperazin-1 -yl)-1H-benzimidazol-2-yl]quinolin-2(1H)-one are provided. In particular, the methods are effective for the treatment of solid tumors or leukemias, including prostate, colorectal, breast, multiple myeloma, pancreatic, small cell carcinoma, acute myelogenous leukemia, chronic myelogenous leukemia, or myelo-proliferative disease. Further provided are methods of measuring the amount of 4-amino-5-fluoro-3-[6-(4-methylpiperazin-1 -yl)-1H-benzimidazol-2yl]quinolin-2(1H)-one and determining a metabolic profile therefore.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(preparation of benzimidazole quinolinones for inhibiting a serine/threonine

kinase)

RN 405169-16-6 USPATFULL

CN 2(1H)-Quinolinone, 4-amino-5-fluoro-3-[6-(4-methyl-1-piperazinyl)-1Hbenzimidazol-2-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

```
=> s 14 and ("tyrosine kinase")
            37 L4 AND ("TYROSINE KINASE")
L6
=> s 14 and ("cancer" or "tumor")
L7
            32 L4 AND ("CANCER" OR "TUMOR")
=> d his
     (FILE 'HOME' ENTERED AT 11:33:03 ON 03 MAY 2007)
```

FILE 'REGISTRY' ENTERED AT 11:33:15 ON 03 MAY 2007

L1STRUCTURE UPLOADED

L20 S L1 EXA

2 S L1 EXA FULL L3

> FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 11:34:23 ON 03 MAY 2007

50 S L3 L4

L5 2 S L4 AND "AUC"

37 S L4 AND ("TYROSINE KINASE") L6 32 S L4 AND ("CANCER" OR "TUMOR") L7

---Logging off of STN---

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	155.15	217.96
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-23.40	-23.40

STN INTERNATIONAL LOGOFF AT 11:37:11 ON 03 MAY 2007